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ABSTRACT

The report discusses activities of a first-year project to identify and solve personnel problems in the Family Services Division of the Missouri Department of Social Services. A specific objective of the project was to develop career ladders within Missouri's state government agencies which would increase job satisfaction and worker productivity. The document is presented in seven chapters. Chapter I introduces the project and discusses organizational problems identified in a 1976 survey of 1200 Family Services Division caseworkers and supervisors. Chapter II provides an overview of the most frequently mentioned problems, including organizational sprawl, interpersonal problems, and low salaries. Chapter III compares problems identified by Division personnel with problems identified in a national survey of personnel in social services agencies conducted by the Department of Health, Education, and Welfare in 1975. Chapters IV and V analyze results of the survey in terms of 13 dimensions, including job pressure, role overload, alienations, job motivation, power, and communications. Chapter VI presents responses offered to open-ended questions dealing with improving work situations, quality of services, improving effectiveness, and making social service jobs easier. The final chapter offers suggestions for the second phase of the project. (DE)

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SP 010 657

Improving Worker Productivity & Effectiveness Through Manpower Planning

Volume II

Diagnosing Organizational Problems in the Division of Family Services

Principal Investigator
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General Research Corporation

PREPARED UNDER

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HELEN MANSFIELD, PROJECT OFFICER
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Division of Corrections
Division of Family Services
Division of Health
Division of Probation and Parole
Division of Special Services
Division of Veterans Affairs
Division of Youth Services

IMPROVING WORKER PRODUCTIVITY AND EFFECTIVENESS THROUGH MANPOWER PLANNING

STATEMENT OF PURPOSE

Since the Missouri Department of Social Services was established under the Omnibus State Reorganization Act of 1974, a pressing concern has been to identify the most critical personnel problems facing the largest Division of the Department, the Division of Family Services, and to develop management strategies addressing those problems in order to improve the productivity, effectiveness and motivation of the many dedicated workers in that Division. This report is the culmination of a one year effort. It is presented in the hope that it may provide useful guidance for the improved management of the human resources of state government.

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BRIEF STATEMENT OF OBJECTIVES AND ACCOMPLISHMENTS

Seven basic objectives have been established for the Section 1115, Research and Demonstration Grant, commonly referred to as the "Manpower Planning Project" within the Missouri Department of Social Services, Division of Family Services. These were to identify the major manpower problems of the Division of Family Services; to identify potential solutions to those problems; to test the potential solutions in demonstration projects; to develop, test, and implement a Manpower Planning Management Information System; to establish mechanisms for continual data gathering, analysis, feedback and evaluation; to develop a plan for post-grant, agency-wide implementation of feasible manpower policies and MIS developed by the project; and to develop an institutionalized internal feedback system for post-grant identification and treatment of manpower problems.

In the pages which follow are the results of the first year's efforts towards those objectives. We believe that several critical personnel problems have been identified along with solutions that will be tested in demonstration activities during the second year of the project. The Manpower Planning Management Information System that has been designed will provide the Division of Family Services with one of the most advanced data based human resources management systems in any state agency. The job analysis and attitude diagnosis will be used to develop career ladders that will hopefully provide greater motivation and job satisfaction and lead to major improvements in worker productivity and effectiveness.

Ewing B. Gourley, Director
Division of Family Services

Jack T. Pitzer, Project Director
Manpower Planning Project

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Chapter 1
INTRODUCTION

As a necessary first step in the development of demonstrations in the second year of the Manpower Planning Project, an effort was undertaken to bring into sharper focus the organizational problems that act as a deterrent to improving the Division's effectiveness. These impediments to improved performance were examined from three perspectives:

- The organizational climate (diagnostic survey)
- The nature of the work (FJA Survey)
- The distribution of the work (Workload Survey)

This volume examines deterrents to Division effectiveness from the organizational climate perspective. For purposes of this research effort, organizational climate can be defined as the "atmosphere" within the Division as expressed from the viewpoint of the personnel who work there. Essentially, 13 perceptual climate dimensions were examined and included such facets as job satisfaction, pressure and motivation, interpersonal relations and communication. A complete list of these dimensions can be found in the appendices to this volume.

Including the Summary, there are seven chapters to this volume which are organized to display a logical progression of investigation into the problems of the organization. Chapter 2 of this report summarizes the observations of project staff on the comments of Division personnel during the numerous interviews that were conducted throughout the State. This chapter is intended to provide an overview of what Division personnel perceived as important deficiencies in the organization. While numerous problems could be characterized as climate-generated, others related to the management practices of Division personnel.

Chapter 3 provides a detailed comparison of the Division's organizational survey with a similar national survey conducted on behalf of DHEW/SRS in 1974. The purpose of this chapter is to obtain another basis for identifying specific climate-related problems that may appear in the Division and to provide a more documented, quantitatively oriented basis of comparison for assessing the relative degree of these organizational deficiencies.

Chapter 4 provides the first level of analysis of the Organizational Diagnostic Survey. It describes, in terms of the 13 climate dimensions, the degree of favorableness of the responses by type of staff and location. The purpose of this chapter is to provide an initial first cut at the survey in an attempt to discern any patterns in the results that would warrant further analysis. A secondary purpose was to place the Division of Family Services within the context of a theory developed by Rensis Likert that seeks to categorize organizations from the least desirable "exploitive authoritarian" to the more desirable "participative" system.

On the basis of the results from Chapter 4, Chapter 5 extends the analysis to an in-depth search for relationships among the survey items. Six survey items were chosen as dependent or criterion variables and were analyzed using a multivariate stepwise regression method. The criterion variables were regressed on between 29 and 79 other question items, the exact number varying with the regression involved. These variables, along with actual computer output, are displayed in the appendices (Appendix F).

Chapter 6 is an extension of Chapters 4 and 5, and provides the summary results of the open-ended questions included in the survey. Content analyses of 200 questionnaires were conducted and computerized frequency counts were provided to aid in the write-up of this chapter. The primary purpose of these open-ended questions was to illicit information and suggestions to improve the work situation that could be considered in developing the demonstration.

Chapter 7 discusses possible demonstrations for the second phase of the project. Essentially, five demonstrations are proposed for consideration which represent an outgrowth of the entire project work, rather than just the results described in the preceding chapters of this volume. To better understand why each demonstration has been proposed, it is suggested that the other volumes on this project be reviewed as well. The purpose of these demonstrations it to alter three facets of the organization:

- The <u>tasks</u> that workers perform, including both their number (workload allocation) and mix (job redesign).
- The organizational <u>climate</u> perceived by staff as it affects their attitudes (e.g., job satisfaction), behavior (e.g., turnover), and performance (e.g., case production, errors, etc.).
- The <u>qualifications</u> required by staff to perform functions that achieve the goals of the organization.

Chapter 2

DISCUSSION OF ORGANIZATIONAL PROBLEMS BASED UPON INTERVIEWS WITH MISSOURI DIVISION OF FAMILY SERVICES PERSONNEL

PURPOSE

The purpose of this chapter is to summarize the comments of Division of Family Services personnel regarding their perception of organizational and manpower problems. It is estimated that during the first year, the project staff (both state-hired and contractor) had face-to-face contact with over a thousand of the Division of Family Services personnel. Contacts were primarily in the form of group discussions and covered almost all functional levels within the organization. The primary objective of these discussions was to obtain assistance from them in developing the data collection instruments but, in addition, project personnel were most interested in obtaining assistance from them in identifying problem areas that should be researched.

At the outset it should be noted that the material discussed in this chapter represents the observations, attitudes and perceptions of those Division personnel interviewed. In some instances the accuracy of their comments can be backed up with empirical evidence that either they or project staff were able to collect; in other cases, however, the comments reflect their perception based on either personal experience or hearsay evidence from others that cannot be documented with "hard" evidence. Regardless of the method in which their opinions were formed, project staff found the information they relayed of considerable value in formulating a more realistic and beneficial research and development project.

PROBLEMS IN MANAGING LARGE ORGANIZATIONS

Administrative Autonomy

In our interviews with Division personnel, particularly those in the lower echelons of the organization, we found that many of their complaints

could be characterized as climate-oriented, i.e., much of what they discussed dealt with the atmosphere of the organization, such as personnel turbulence, ineffective communication and excessive administrative constraints. While it is not unusual to receive comments such as these, it was somewhat surprising to find that very few of their problems could be characterized as client-oriented. Caseworkers, in particular, felt confident that they could perform their jobs well if they receive positive support from the organization.

While complaints regarding working conditions (climate) were more prevalent with those personnel in the lower echelons of the organization, such complaints were by no means absent in other higher levels of the organization. Their complaints however were more or less directed at the State legislature and Federal authorities. Expressions of powerlessness pervaded all echelons of the organization. Those in senior administrative positions expressed dissatisfaction with the excessive control that the State legislature and Federal authorities exercised over programs of benefits and services to Missouri residents. Under these circumstances, personnel find limited opportunity to involve themselves in the formulation of substantive policy, nor even in the development of the programs that arise from these policies. To a large extent they have been excluded from sharing in these responsibilities and find that most of their effort is expended in coping with the current maze of Federal and State regulations, or at best, searching for ways to more efficiently manage programs and resources formulated and allocated by those outside the Division.

Growth in Caseloads

A cursory examination of the statistics on Missouri public assistance programs reveals a literal explosion in the growth of those programs and the number of recipients receiving benefits. Over the six-year period, FY1970-75, combined state-federal expenditures increased by over one-third, from $265 to $355 million. The largest program expansion occurred in the ADC program where 29,000 families were receiving benefits in 1969 and, as of October 1976, over 88,000 families were receiving benefits. Reported incidents of child abuse has more than tripled since mandatory reporting became effective in 1969. The rate of growth in such incidents over the past three fiscal years has been averaging over 30% annually. During the

thirteen-month period ending September 30, 1976, the number of calls received over the "hot-line" recently installed by the Division approached 13,000, involving nearly 25,000 children under the age of 17.

The growth in social welfare programs is not, of course, limited to Missouri. Between FY 1970 and FY 1975, the nation increased such spending from $145.8 billion to $286.5 billion (federal, state and local expenditures are included in these figures); a breakdown of these expenditures by program and year is found in Table 2.1.

Nationally, the number of families involved in ADC programs grew from 1.88 million in 1969 to 3.57 million in 1976.[1/] Growth in child abuse is somewhat more difficult to document, inasmuch as states differ in their handling of such cases. Table 2.2 summarizes the information that is currently available (information source was recommended to GRC by the U.S. Department of Health, Education and Welfare).

In spite of this near phenomenal growth in programs over the past several years there has not been a significant expansion in the number of personnel who are charged to manage and execute these programs under the Division of Family Services. In FY 1970, the average number of employees was 5,260; as of October 1976, the number stood at 5,456, a difference of approximately 4%. Further examination of the data over that time period reveals that the peak level of employment was reached in June 1975, when 5,844 employees were on the Division's roles, approximately 10% more than the average of FY 1970.

While administrative costs have grown by about three-fourths over the six-year period FY 1970-75, the bulk of these expenditures have gone to the payment of personnel. Roughly 70% of the increase in administrative costs is accounted for by higher personnel salaries. If budgetary data available in the annual reports of the Division of Family Services is a fair representation of all expenditures by the Division, one can conclude that this organization is characterized as highly labor-intensive as opposed to organizations whose functions and outputs require a more capital-intensive operation. Based on our discussions with various Division personnel, both

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[1/] Data for a969 comes from the Statistical Abstract of the United States (Bureau of the Census, U.S. Dept. of Commerce); data for 1976 Public Assistance Statistics (U.S. Dept. of Health, Education and Welfare, SRS/AAIS/NCSS Publication A-2).

Table 2.1—Social welfare expenditures under public programs, selected fiscal years, 1929-75[1]

(In millions)

Program	1929	1940	1955	1960	1965	1970	1972	1973	1974	1975 [2]
	Total expenditures									
Total	$3,021.2	$23,506.4	$32,620.9	$52,293.3	$77,175.3	$145,761.1	$191,413.6	$214,389.9	$230,302.6	$286,547.0
Social insurance	342.4	4,946.6	9,834.9	19,306.7	28,122.8	54,691.2	74,810.2	86,152.7	98,932.1	123,444.1
Old-age, survivors, disability, and health insurance [3]		784.1	4,436.3	11,032.3	16,997.5	36,838.4	48,229.1	57,766.5	66,296.6	78,436.3
Health insurance (Medicare)[4]						7,149.2	8,819.2	9,478.8	11,347.5	14,781.4
Railroad retirement [5]		206.4	556.0	934.7	1,128.1	1,609.9	2,141.2	2,477.5	2,892.6	3,065.1
Public employee retirement [6]	113.1	817.9	1,386.5	2,569.9	4,328.5	8,658.7	11,921.3	14,010.8	16,692.1	20,000.0
Unemployment insurance and employment service [7]		2,190.1	2,080.6	2,829.6	3,002.6	3,819.5	7,681.0	6,066.9	6,680.7	14,296.5
Railroad unemployment insurance		119.6	158.7	215.2	76.7	38.5	86.0	45.2	25.6	41.5
Railroad temporary disability insurance		31.1	54.2	68.5	46.5	61.1	42.1	34.9	31.5	33.0
State temporary disability insurance [7]		72.1	217.5	347.9	483.5	717.7	783.7	845.2	915.4	994.2
Hospital and medical benefits [8]		2.2	20.0	40.2	50.9	62.6	68.3	69.5	70.7	73.3
Workmen's compensation [9]	229.3	625.1	943.0	1,308.5	1,859.4	2,960.4	3,955.7	4,903.6	5,647.6	6,437.5
Hospital and medical benefits [9]	75.0	193.0	315.0	420.0	580.0	985.0	1,185.0	1,336.0	1,580.0	1,830.0
Public aid	60.0	2,496.2	3,008.0	4,101.1	6,283.4	16,487.7	26,077.0	28,696.5	31,967.0	40,536.3
Public assistance [10]	59.9	2,490.2	2,941.1	4,041.7	5,874.9	14,433.5	21,895.0	24,002.6	23,827.4	26,610.6
Vendor medical payments [11]		51.3	211.9	492.7	1,367.1	5,212.8	7,751.6	9,208.6	10,371.9	12,968.0
Social services [11]						712.6	2,180.5	2,306.2	2,155.0	2,522.5
Supplemental security income [12]								45.7	3,799.9	6,036.4
Food stamps					35.6	576.9	1,868.6	2,218.1	2,818.4	4,677.4
Other [13]	.1	6.0	61.9	59.4	373.0	1,477.3	2,316.4	2,430.2	2,581.3	3,211.9
Health and medical programs [14]	361.1	2,063.5	3,103.1	4,463.8	6,246.4	9,752.8	12,681.6	13,187.5	14,369.7	16,635.7
Hospital and medical care	146.3	1,222.3	2,042.4	2,853.3	3,452.3	5,176.4	6,834.2	7,180.5	7,802.0	8,302.7
Civilian programs	117.1	886.1	1,297.6	1,973.2	2,315.5	3,416.5	4,293.2	4,712.5	5,061.0	5,491.7
Defense Department [15]	29.2	336.2	744.8	880.1	936.8	1,759.9	2,541.0	2,468.0	2,741.0	3,011.0
Maternal and child health programs [16]	6.2	29.8	92.9	141.3	227.3	431.4	498.3	455.3	498.4	540.0
Medical research [8]			.2	.6	4.3					
Medical research		69.2	132.8	448.9	1,168.2	1,561.4	1,772.0	2,001.0	2,002.0	2,424.0
School health (education agencies)[17]	9.4	30.6	68.9	101.0	142.2	246.6	281.3	300.0		
Other public health activities	88.8	350.8	383.7	401.2	671.0	1,405.0	2,075.3	2,151.7	2,026.3	3,457.0
Medical-facilities construction	100.4	380.8	385.4	518.1	588.3	932.1	1,423.5	1,099.0	1,347.0	1,712.0
Defense Department		1.1	33.0	40.0	31.1	82.5	100.0	76.0	86.0	157.0
Other	100.4	380.8	382.4	478.1	557.2	879.6	1,323.5	1,023.0	1,261.0	1,555.0
Veterans' programs	657.9	6,865.7	4,833.5	5,479.2	6,031.0	9,078.0	11,822.4	13,026.4	14,112.4	16,660.8
Pensions and compensation [18]	434.7	2,092.1	2,889.7	3,402.7	4,141.4	5,393.8	6,209.3	6,605.8	6,777.4	7,678.3
Health and medical programs	50.9	748.0	761.1	954.0	1,228.7	1,784.0	2,431.4	2,768.1	2,983.6	3,468.9
Hospital and medical care	46.7	582.8	721.5	879.4	1,114.8	1,681.4	2,255.6	2,587.3	2,786.6	3,242.3
Hospital construction	4.2	161.5	34.1	50.6	77.0	70.9	109.8	104.8	118.9	135.7
Medical and prosthetic research		3.7	5.6	15.1	36.9	61.8	66.0	74.0	78.0	91.0
Education		2,891.6	706.1	409.6	40.9	1,018.5	1,924.6	2,647.9	3,206.8	4,420.6
Life insurance [19]	136.4	475.7	490.2	494.1	434.3	502.3	823.7	532.2	538.5	536.1
Welfare and other	35.8	558.3	186.5	218.8	185.8	379.4	433.3	474.4	606.1	637.0
Education [20]	2,433.7	6,674.1	11,157.2	17,626.2	28,107.9	50,905.0	59,626.2	65,379.1	70,149.5	78,438.5
Elementary and secondary	2,216.2	5,596.2	9,734.3	15,109.0	22,357.7	38,632.3	44,524.0	48,378.9	52,063.5	57,905.4
Construction [8] [21]	377.0	1,019.4	2,231.9	2,661.8	3,267.0	4,659.1	4,458.9	5,008.4	5,259.3	5,487.0
Higher	182.1	914.7	1,214.4	2,190.7	4,826.4	9,970.3	11,850.8	13,259.2	13,893.6	15,972.5
Construction [8]	.2	310.3	198.6	357.9	1,081.4	1,629.1	1,736.7	1,793.4	1,738.7	1,942.0
Vocational and adult [22]	34.9	160.8	204.9	298.0	853.9	2,148.9	3,034.8	3,496.4	3,900.3	4,293.6
Housing		14.6	89.3	178.8	318.1	701.2	1,332.4	2,179.6	2,553.8	2,954.0
Public housing		14.5	74.7	143.5	234.5	459.9	731.1	1,101.9	1,222.9	1,456.0
Other		.1	14.6	35.2	83.6	241.3	601.3	1,077.7	1,330.9	1,498.1
Other social welfare	76.2	447.7	619.0	1,130.4	2,065.7	4,145.2	5,363.9	5,788.2	7,178.1	7,877.5
Vocational rehabilitation	1.6	30.0	42.4	96.3	210.5	703.5	875.5	911.7	926.8	980.0
Medical services [23]	.1	7.4	9.1	17.7	34.2	133.8	179.2	178.0	186.2	190.0
Medical research [8]			.3	6.6	22.4	29.6	17.0	15.0		
Institutional care [24]	74.7	145.5	195.3	420.5	789.5	201.7	251.1	263.5	284.8	301.8
Child nutrition [25]		160.2	239.6	308.7	617.4	896.0	1,502.3	1,707.0	2,023.0	2,517.7
Child welfare [26]		104.9	135.1	211.5	354.3	585.3	532.0	526.0	510.0	480.0
Special OEO and Action programs [27]					51.7	732.8	782.7	894.9	766.7	602.3
Social welfare, not elsewhere classified [28]		7.1	6.5	12.4	42.3	1,005.6	1,420.2	1,483.1	2,666.8	3,028.7

e footnotes on next page.

Source: Skolnik, A.M. and Dales, S.R. "Social Welfare Expenditures, 1950-1975," from the Social Security Bulletin, January 1976.

Footnotes, Table 2.1

[1] Expenditures from Federal, State, and local revenues (general and special) and trust funds and other expenditures under public law; includes capital outlay and administrative expenditures unless otherwise noted. Includes some payments abroad. Fiscal years ended June 30 for Federal Government, most States, and some localities.

[2] Preliminary estimates.

[3] Excludes financial interchange between OASDHI and railroad retirement.

[4] Included in total directly above; includes administration.

[5] Excludes refunds of employee contributions; includes noncontributory payments to retired military personnel and survivors. Administrative expenses for Federal noncontributory retirement not available.

[6] Includes unemployment compensation under State programs, programs for Federal employees and ex-servicemen, trade adjustment and cash training allowances, and payments under extended, emergency, disaster, and special unemployment insurance programs.

[7] Cash and medical benefits in 3 areas. Includes private plans where applicable and State costs of administering State plans and supervising private plans. Administrative expenses of all private plans and all data for Hawaii not available.

[8] Included in total directly above; excludes administrative expenses, not available separately but included for entire program in preceding line.

[9] Cash and medical benefits paid under Federal and State laws by private insurance carriers, State funds, and self-insurers. Includes Alaska and Hawaii beginning 1959–60. Administrative cost of private carriers and self-insurers not available. Starting 1970, Federal expenditures include "black lung" benefit programs administered by Social Security Administration and by Department of Labor.

[10] Represents categorical programs under the Social Security Act and (from State and local funds) general assistance. Starting 1969, includes work incentive activities.

[11] Included in total for public assistance above; vendor medical payments include administrative expenses of medical assistance (Medicaid) program.

[12] Benefits began January 1974; fiscal year 1973 data represent administrative expenses only.

[13] Work relief, other emergency aid, surplus food for the needy, repatriate and refugee assistance, and work-experience training programs under the Economic Opportunity Act and the Comprehensive Employment and Training Act. See footnote 28.

[14] Excludes State and local expenditures for domiciliary care in institutions other than mental or tuberculosis and services in connection with OASDHI, State temporary disability insurance, workmen's compensation, public assistance, vocational rehabilitation, and veterans' and antipoverty programs (included in total expenditures for these programs).

[15] Includes medical care for military dependent families.

[16] Includes services for crippled children.

[17] Starting 1974, data not separable from expenditures under "education."

[18] Includes burial awards. Starting 1965, includes special allowances for survivors of veterans who did not qualify under OASDHI. Starting 1974, subsistence payments to disabled veterans undergoing training shifted from veterans' pensions and compensation to veterans' education subgroup.

[19] Excludes the Servicemen's Group Life Insurance program.

[20] Federal expenditures for administrative costs (Office of Education) and research included in total only.

[21] Construction for vocational and adult education included with elementary-secondary school construction.

[22] Medical services and research included in total; excludes administrative expenses.

[23] Federal expenditures represent primarily surplus food for institutions.

[24] Surplus food for schools and programs under National School Lunch and Child Nutrition Acts. State and local funds represent direct appropriations.

[25] Represents primarily child welfare services under the Social Security Act. Starting 1969, excludes adminstrative expenses.

[26] Includes domestic programs consolidated in fiscal year 1972 under Action (former VISTA, Foster Grandparents, and other domestic volunteer programs) and special OEO programs such as community action and migrant workers. Other OEO programs listed in appropriate subsection under public aid and education.

[27] Federal expenditures include administrative and related expenses of the Secretary of Health, Education, and Welfare and of the Social and Rehabilitation Service; Indian welfare and guidance; aging and juvenile delinquency activities; and certain manpower and human development activities. State and local expenditures include amounts for antipoverty and manpower programs, day care, child placement and adoption services, foster care, legal assistance, care of transients, and other unspecified welfare services; before 1970, these amounts included with institutional care.

[28] Not available.

[29] Except as otherwise noted (see footnotes 7 and 9).

Source: Data taken or estimated from Treasury reports, *Federal Budgets*, *Census of Governments*, and reports of Federal and State administrative agencies. For detailed description of programs and for single-year historical data, see *Social Welfare Expenditures Under Public Programs in the United States, 1929–1966* (Research Report No. 25).

Table 2.2

OFFICIAL REPORTED CASES OF CHILD ABUSE AND NEGLECT

Year	No. states or territories	States/territories reporting abuse only	Total	Cases Abuse only	Neglect only	Undifferentiated or both
1971	21	19	47,023	9,299	16,378	21,346
1972	28	19	138,855	15,265	31,980	91,619
1973	31	19	183,932	29,560	37,365	116,647
1974	53[1/]	5	229,832	35,086	70,846	123,300
1975	52[2/]	5	294,796	43,427	70,046	179,777

[1/] Idaho holdout.

[2/] Idaho, Maryland and Guam. Maryland data was late. It is included in total but has not been added to actual as yet.

States reporting abuse only (5 in 1975) have laws on books prohibiting reporting of neglect which could be considered judgmental. Dr. Lebsack anticipated that within 2 years laws will be passed allowing the reporting of child neglect cases in those states. In 1975, clearing house set up for reporting these data.

Source: American Human Association, Children's Division National Study on Child Abuse and Neglect Reporting, P.O. Box 1319, Denver, CO 80201, Dr. J. Robert Lebsack, 303-779-1400.

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the opportunity and the desire may exist to trade off more labor for greater capital to improve the overall effectiveness of the organization. Evidence of this already exists on the part of the Division in their desire to develop a large data processing facility in an attempt to improve their operating efficiency. Other evidence collected suggests that a move to a more capital-intensive organization is both desirable and beneficial. The results of the content analysis of the Organizational Survey reported in this volume (i.e., Chapter 6) show a high frequency of responses requesting more equipment to do their job. More importantly, evidence from the Functional Job Analysis indicates that the bulk of the work is heavily data-oriented and that the majority of caseworker output is information.

In general, it appears that the Division has been tasked to accomplish a much larger volume of work over the past 6 years with about the same number of personnel, and with only modest and probably insufficient capital investment. While we have not documented this carefully, we believe it is true that the bulk of the growth in caseloads has occurred in the large city areas such as St. Louis City and county and Kansas City. Where the workload has increased in these areas, there has been a greater tendency toward specialization of tasks — this being done under the presumption that the work can be accomplished more efficiently.

Aside from an increasing tendency toward specialization, we could find no evidence of revolutionary shifts in the way in which work was accomplished to accommodate the ever-increasing workloads. Inevitably, when an existing organizational structure attempts to absorb a very large increase in workload, inefficiencies and production problems are sure to develop. Since the manpower planning project was begun, increased attention has been given to the quality of output in addition to the quantity of work that is being done. Unfortunately, the problem historically with service organizations has been to accurately measure quality output. For the Division of Family Services, this has been more of a problem in the Social Services area than in Income Maintenance.

Setting Organizational Objectives

In an effort to improve performance, the Division has instituted a Management By Objectives (MBO) plan to be implemented throughout the State. While it may be too early to judge the impact of such a plan, information collected last summer from the Organizational Survey revealed that while caseworkers have a reasonably good understanding of their state and office goals (see caseworker question #2.94), they find the goals somewhat unrealistic and unachievable (#2.95). They also feel that these goals are not entirely relevant to client needs (#2.96). While we did not pursue this very intensively, we found little evidence that caseworkers and lower level supervisors were permitted to participate in the development of this MBO plan. There is also evidence from the Organizational Survey that caseworkers do feel the pressure and anxiety created by apparently conflicting objectives to meet both quantitative and qualitative output goals (see caseworker question #2.37). In fact, the mean scores of 3.7 and 3.9 for Income Maintenance and Social Service caseworkers, respectively, represent some of the highest and least favorable scores reported on the entire survey of over 100 questions. Survey results for questions 2.94, 2.95 and 2.96 are found in Appendix I, for caseworkers.

The evidence from the Organizational Survey and interviews with state personnel indicates that obtaining measures of organizational effectiveness is a continual and perplexing problem and deserves greater attention on the part of the manpower planning project staff. In a broader context, senior Division personnel appear to be frustrated in their attempts to monitor the dynamic behavior of an organization in some systematic way that would permit them to more effectively achieve their organizational objectives. Information needs would seem to cover three broad areas. First, general organizational characteristics that would better permit them to

understand who they are and what they are doing; second, measures of organizational health which are primarily personnel-oriented — an important facet in a labor-intensive organization; and third, measures of organizational effectiveness.

Under general organizational characteristics one might consider the following:

- number of cases
- average dollar value of each case
- geographic distribution of S.S./I.M. output
- number of personnel positions by type
- types of S.S./I.M. benefits offered
- volume of case transactions

From the data we have examined, the Division seems to be capable of producing statistics of this nature. Understanding the significance of the data, however, is still a problem and it would appear that the primary objective of producing such data in the past was to satisfy the needs of the State Legislature and the requirements of the Federal government, but it is certainly not at all clear to what extent the generation of such data can assist the the organization in improving their operational effectiveness or in formulating more realistic organizational objectives.

The second area is the need to develop the capability to measure what we are calling the "health" of an organization. This would include but is not limited to the following aspects:

- level of job satisfaction
- degree of job turnover
- promotion rates and opportunities
- year of service distributions by skill category

The need exists to continually collect information on what we have characterized here as the "health" of an organization. The previous list is not intended to be all-inclusive but if an organization is severely suffering in any one of these areas, it is unlikely that considerable improvement in

worker performance can be expected. Data to develop indicators of organizational health should be systematically collected, for it can be dangerous and counterproductive to stereotype an organization on hearsay evidence which has not been documented in an objective way. Information on job satisfaction (see questions 2.1-2.13 on both the caseworker and supervisor surveys), and more broadly information on organizational climate, has been systematically collected through the Organizational Diagnostic Survey conducted during the summer of 1976. This information-gathering process should continue, albeit on a smaller scale with a more selective sample.

Information on job turnover is collected and disseminated by the Division but it may not be specific enough to develop improved recruiting and retention policies. The general evidence indicates that the caseworker and clerical personnel experience the highest turnover rates; however, more information should be collected on the demographic characteristics of those cohorts that experienced the highest turnover rates. For example, we know that Income Maintenance caseworkers experienced the highest turnover rate with an age and education background similar to Social Service caseworkers and generally exhibit the least favorable scores on all climate dimensions in the Organizational Survey. (A listing of climate oriented questions on the current surveys is found in Table 3.3, p 3-4 of this volume.) Further preliminary analysis of the survey data (both Organizational and FJA) indicates that the nature of the work for Income Maintenance caseworkers is not sufficiently challenging (see question 2.19 and 2.20 on the caseworker and supervisor surveys, respectively) given their educational background. We suspect, however, it is not the education per se they receive, but rather the high expectations concerning job relevance inculcated during their college tenure. This can conflict with the realities of the work situation in the Income Maintenance field. This disillusionment and the inanimate nature of the work (that is, primarily data and things rather than people-oriented) can result in abnormally high turnover. We are also aware, however, the turnover rate has been declining from a high of about 35% in FY 1972 to a current level of about 25%. One should be cautious, however, in assigning any qualitative

judgment to the magnitude of the turnover rate, for it could be beneficial for an agency with low skill requirements to encourage a high turnover rate and avoid the cost of more experienced personnel who may add little to the overall performance of the organization. More attention, then, should be given to what constitutes an optimum turnover rate before judgment can be made as to whether the current or previous turnover rates are too high or too low.

Related to turnover, certainly, are promotion rates and perceived promotion opportunities. Information gathered during the interviews indicated that caseworkers were well aware of the limited and discouraging promotion opportunities available to them. One frequently cited complaint which was noted even from senior Division personnel, was the lack of information made available to caseworkers on promotion or job reassignment opportunities. Apparently positions that were vacated went unfilled because of an unawareness on the part of caseworkers of the positions' availability. Unfortunately, even with a more carefully planned career ladder, there are inherent constraints due to the logistics of the organization which may prevent adequate promotion opportunities equitably distributed among all caseworkers. Because the organization is disbursed throughout 115 counties, those with the best promotion opportunities may be those more willing to relocate; that is, given the very geographically dispersed nature of the organization at the lower echelons, it is very unlikely that a candidate interested in promotion to supervisor would find it in his immediate office. This may impact particularly on married women who are using the caseworkers' salaries as a supplemental source of income for a family where the job of the male head of household is of primary consideration (whose own job may not require relocation to enhance promotion opportunities).

Information on the skill and experience distributions of the work force can also be of considerable value. Pay and promotion policies should be designed with some understanding of where and to what extent skill and experience shortages exist. In interviews with senior Division personnel, we found little evidence that personnel policies were being developed with the goal of achieving an inventory of personnel stratified by some objective years of experience and skill distributions. It is recognized, however, that senior personnel in the Division are subject to the policies of State Civil Service, which may not foster more flexible personnel policies to permit more vigorous management of the Division's inventory of personnel.

Developing measures of organizational effectiveness has been a continuing struggle on the part of the Division with varying degrees of success. These might include:

- Client errors by type, frequency, and dollar value
- Turnaround time for client benefits and payments
- Quality of service
- Ability to forecast future demand for services and benefits

Efforts to develop measures of organizational effectiveness should be compatible with the Management By Objectives (MBO) plan developed by the Division. These measures should indicate the extent of attainment of these objectives, for when indicators of efficiency are tied to objectives they can be more appropriately called indicators of effectiveness. Many of these measures of effectiveness relate directly to the outputs of the organization and data on these outputs reside primarily in the client data base being developed by State personnel. Since the client data bases are not currently operational, it is not possible to systematically measure the extent of the organization's effectiveness on each of these and other criteria. Developing measures of organizational effectiveness is more difficult in the Social Services area than in Income Maintenance. This is primarily because the output of Social Services workers and caseworkers is less tangible than that of their Income Maintenance counterparts. There also appears to be more turmoil associated with developing program objectives in the Social Services arena. For the past 2 years, increasing emphasis has been placed on expanding the child abuse and neglect programs and enlarging the State-supervised purchase of services activities. This also coincides with the decrease in Social Services staff of approximately 5% as directed by the State Legislature.

We have noted that data is being collected on these various measures, particularly in the realm of client errors and currency which are appropriate for Income Maintenance work. From information we were provided, it appeared that the most comprehensive monitoring was done in the Food Stamp program through the Efficiency and Effectiveness Unit (EEU). They were charged to visit each county and review 25 food stamp cases determined to be eligible and 5 cases determined to be ineligible. During their review they would examine claim determination procedures and hearings, security procedures,

and the personnel structure in the office. Their report would also include data on the number and types of errors found, with recommendations for their correction. The only complaint we were aware of regarding this unit was that they were understaffed and more work needed to be done in this area.

In summary, the need exists to develop a comprehensive set of organizational indicators that better describes its output, its health, and, most importantly, its effectiveness. Except for estimates of the cost of Income Maintenance errors, we found little evidence of attempts to develop measures of cost effectiveness. Developing measures of this type should be particularly helpful in justifying resource requirements before the State Legislature.

PROBLEMS IN THE MANAGEMENT OF PERSONNEL RESOURCES

Recruiting

Attempts to manage personnel resources from the State office level cannot be easily accomplished given the political independence of each of the counties throughout the State. In terms of recruiting, we found that the Division's personnel office faced a perplexing problem that limits their control over hiring to fill vacancies in county offices. Apparently the minimum qualifications for hiring are specified by the State Merit System but the decision over which of the eligibles will be hired is left to the county director. From what we have been able to determine, it appears that recruiting at the State level is more of a passive than an active process; that is, the Division relies primarily on a flow of walk-in applicant traffic to fill its placement needs and that very limited active recruiting and promotion of job opportunities to seek qualified candidates is engaged in by the Division. It could be argued, though, that such active recruiting practices belong more at the grass roots level within the county offices rather than at the State level. While recognizing this, the Division should consider developing a more closely coordinated recruiting program with adequate promotional support in terms of recruiting literature and possibly special assistance in preparing county directors in developing better interviewing techniques.

If both clerical and caseworker turnover is a problem, then a solution to it lies partially in the development of recruiting strategies that will select candidates with a lower probability of quitting. Members of the Division's personnel office indicated that there was an inability to predict the strength

of the relationship between job qualification standards, job performance, and personnel retention. Further, until these relationships can be quantified, it would be difficult if not impossible to develop improved recruiting strategies and hiring practices. We have already pointed out that the evidence seems to indicate that Income Maintenance caseworkers experience the highest turnover, the least job challenge, the least favorable climate scores, and are the most over-qualified to perform the work. This problem is further addressed in the chapter on demonstration projects in which an experiment is recommended to modify the recruiting practices in certain selected office sites and then monitor the attitudes and performance of new workers in the test and control sites.

Training

Another area discussed was that of training of personnel. Except for the initial orientation periods, most training could be characterized as "on-the-job" training, but it was difficult to assess the extent to which such on-the-job training occurred. Evidence collected from the surveys and workload standards effort indicate the training was minimal if not nonexistent, yet one of the arguments for extensive layers of supervision was the continual need to provide on-the-job training due to high turnover in the offices. At the State level, personnel interviewed indicated that resources dedicated to training were inadequate and that staff on the Manpower Planning Project should investigate ways to provide improved justification for greater training resources. This potentially could become a very important area of investigation if entry level job qualifications are lowered in an effort to improve job satisfaction and retention since performance may suffer without more intensive and effective on-the-job training. It could be argued that the higher the turnover rate, the higher the cost of training to maintain a numerically constant work force, but since there was little evidence of extensive on-the-job training, it would not be possible to show that such a phenomena occurs within the Division. Thus higher or lower turnover will not produce more or less on-the-job training but can, and probably does, affect the organization's total performance. Aside from an apparent preference toward on-the-job training, we were unable to gather any clear understanding of what type of training should occur — whether or not self-paced instruction would be beneficial, whether or

not greater capital investment in training aids would help, or even who should be primarily responsible for giving the training. Finally, we realize that these comments may be subjected to some criticism because we were informed by Division personnel that an active training program did exist.

Personnel Assignment

In our discussions with senior management personnel, a number of other problem areas were surfaced. The first was their desire to better manage personnel end strengths and grade distribution. This was coupled with an expressed need for greater flexibility in promotions and merit pay raises. The computerized manpower planning system being developed under this project should be of considerable assistance to Division personnel in this area. The personnel data base schema is capable of producing reports which would display this type of information. Since salary data is also available in this system, it is possible to begin assessing the budgetary impact of alternative promotion rates and/or salary increases. Real time simulations around these variables, however, would require additional program modifications that are certainly within the realm of possibility in the second year of the Manpower Planning Project.

Another broad problem area surfaced dealt with the allocation of personnel and cases throughout the state. Apparently reallocation plans have met considerable county resistance. This is understandable if each county is considered an autonomous political entity, but a number of other reasons probably account for this resistance — the lack of detailed work measurement standards, inadequate information on current worker output, and problems in forecasting short-run demands for benefits and services would tend to place any reallocation plan under suspicion. One of the primary objectives of the Manpower Planning Project during the first year is to develop an improved system for calculating workload standards. The results of this effort appear in another volume of the final report.

Other personnel issues raised were the following:

- Staff morale appeared to be a number one problem, but it was never quite clear the proper context in which this problem should be defined. Inadequate pay was mentioned as a factor in low morale; also, in-state (urban) vs out-state (rural) differences were cited. The most

serious morale problems appeared to exist in the urban areas, with Social Service personnel being the most vocal about their problems. The results of the Organizational Survey discussed in Chapters 4 and 5 of this volume support the contention that there is a distinct difference in attitudes between urban and rural caseworkers, but the results do not support the contention that Social Services personnel have the most serious morale problems.

- Attempts to unionize caseworkers was also discussed. All senior administrative personnel appear to be neutral toward the issue. Few felt that attempts to unionize caseworkers would be successful. This in part appeared to be due to the diversity of roles and backgrounds of Division personnel. Urban caseworkers, however, appear to be the most likely group for unionization, with Social Service Workers the least likely and more inclined to develop a more progressive professional association. Since project surveys did not contain questions dealing with unionization, it is not possible to validate the views and perceptions of those interviewed.

- There was some criticism of the quality of supervision. Interviews through all echelons of the organization suggested that too much "buck-passing" was taking place. This is probably due to the large number of intermediate management levels through which information and decisions must pass. The organization appeared too top-heavy to some, that is, over-organized and over-populated at the top and under-organized and under-populated at the bottom. An examination of turnover rates by years of service would probably reveal the highest turnover rates and severest shortages in the lower echelons of the organization, with the lowest turnover rates and least staffing problems at higher echelons. Regarding quality of supervision, results of the Functional Job Analysis Self-Report Survey indicate that supervisors in the Division are not managing; they are acting primarily as communication links to pass along information and organizational policy procedures developed by those higher up in the chain of command. Such essential functions as planning, developing objectives, setting workload and performance standards for subordinates and providing feedback to their subordinates regarding their work and performance is severely lacking. While the data from the Job Analysis indicate that

supervisors are not performing appropriate functions, the evidence from the Organizational Survey indicates that caseworkers are very satisfied with their supervisors. This is a somewhat curious if not conflicting result which prompted further analysis by the Project Team. Chapter 5 of this volume provides the results of a multivariate analysis of supervisor satisfaction ratings by caseworkers. When a combined analysis of all caseworkers was conducted, the most significant factor associated with satisfaction with superiors was the extent to which caseworkers knew "where they stood" with their superiors. Apparently the more interpersonal contact there was between superiors and subordinates the greater the extent of satisfaction with those superiors. Communication is a necessary but not sufficient condition of effective management and the other functions of a supervisor should be exercised.

- There were numerous complaints of the salary system. Much of this appeared to be centered at the issue of equity in the distribution of salary increases rather than the absolute amount received. The subject of pay satisfaction is addressed in considerable detail in Chapters 4 and 5 of this volume. It was also pointed out that salaries did not appear to be competitive with private industry or even other state agencies. A particular problem appeared to be salary levels for bordering states which were higher for caseworker personnel and had induced some individuals to leave Missouri and work for another state agency offering higher pay. One individual even went so far as to say that the Division was a training ground for casework agencies in bordering states; that is, as soon as Division personnel obtained enough experience, they would apply for employment in the bordering states, particularly Illinois and Kansas.

Chapter 3

COMPARISON OF RESULTS OF THE 1975 NATIONAL SURVEY OF PERSONNEL IN FINANCIAL ASSISTANCE AGENCIES WITH THE 1976 MISSOURI DIVISION OF FAMILY SERVICES SURVEY

INTRODUCTION

The following discussion is devoted to a comparison of HumRRO's 1975 study of financial assistance agencies, and the DFS 1976 caseworker/supervisor surveys. Since the former study concentrates on income maintenance personnel, only the income maintenance portion of the DFS survey will be considered. While similar in certain respects, there are important differences in these studies. These differences can affect the validity of any comparisons that might be made, and their existence must therefore at least be considered.

Since the current chapter is devoted to a comparison of HumRRO and DFS results, no attempt will be made at a comprehensive survey of these differences; mention of some of the more obvious and important ones will suffice. Of the major discrepancies, perhaps the most significant lies in the nature and type of agency that was considered. The HumRRO study considers 17 geographically dispersed agencies which range in size from 19 persons/agency to 952 persons/agency. Nine of these agencies were classified as large (150 to 952 personnel/agency) and eight as medium sized (19 to 71 personnel/agency). In terms of control, 10 of the surveyed agencies are administered at the state level, with the remainder being administered at the county level.

In contrast, the DFS (1976) study is focused on a single agency which is administered at the state level. The scope of the DFS (1976) study is clearly more specialized than that of its HumRRO counterpart and caution should be exercised in applying it to agencies other than Missouri's Division of Family Services.

Another important difference lies in the composition of each study's questionnaire. The HumRRO instruments has more questions (289 vs 107 for the DFS caseworker/supervisor surveys) and is able, therefore, to probe in a wider area. Specific examples include HumRRO's investigations into the style and nature of agency leadership, and into the clarity of preceived agency policies. The DFS survey considers neither matter directly and comparison of results in these areas is clearly impossible.

Finally, HumRRO took caseworker, supervisor and administrator responses and aggregated them into unified results. The DFS study, on the other hand, presents separate results for each job title. While there are other differences that could be mentioned, these should serve to indicate that comparisons of the two studies and use of any resulting conclusions should be treated with some care.

Outline of Remaining Sections of the Chapter

The remainder of this chapter discusses three types of comparisons. Each type will have its own section. They are as follows:

- Description of the characteristics of the personnel involved (e.g., age, sex, time with the agency, education).
- Description of the various factors that affect an agency's organizational climate (climate is defined as an agency's atmosphere as it is perceived by its personnel; this is the HumRRO definition of climate).
- Comparison of HumRRO's correlation and DFS's regression results.

DEMOGRAPHIC CHARACTERISTIC COMPARISONS OF AGENCY PERSONNEL

Table 3.1 contains the comparisons of personal characteristics of HumRRO and DFS respondents. Since the DFS survey involves a state-administered agency, data for this agency type will be used in the HumRRO portion of the comparison.

In interpreting the DFS results involving percentages, it should be noted that these percentages are based only on valid responses; missing responses are not considered.

The composition of the respondents by agency positions is given in Table 3.2 on the following page.

The number of completed questionnaires which were collected in the HumRRO study amounted to 1,121. The corresponding number of questionnaires for DFS I.M. caseworkers and supervisors amounted to 823.

COMPARISON OF RESULTS INVOLVING AGENCY CLIMATE IN THE DFS (1976) AND HUMRRO (1975) STUDIES

Agency climate is defined as the atmosphere that is perceived in the agency by those who work for it. The HumRRO study defines 17 "dimensions" that it uses to measure climate. On comparing these dimensions with available variables in the DFS questionnaires, it was found that all but three

Table 3.1

COMPARISONS OF PERSONNEL CHARACTERISTICS OF HUMRRO AND DFS RESPONDENTS

Characteristic	HumRRO	Income maintenance caseworkers	Income maintenance supervisors (I,II)	Income maintenance supervisors(III,V)
Mean age	32.5 yrs.	34.8 yrs.	41.9 yrs.	51.0 yrs.
% female	79.1%	78.0%	79.5%	50.0%
Mean years in field	4.1 yrs.	5.4 yrs.	12.5 yrs.	21.8 yrs.
Mean years in agency	3.6 yrs.	4.6 yrs.	10.9 yrs.	20.6 yrs.
Mean years, education	15.2 yrs.	15.1 yrs.	15.1 yrs.	14.9 yrs.
% holding college degree*	51.3%	96.9%	94.0%	100.0%
% holding masters degree**	4.6%	6.1%	6.0%	0.0%

*Includes the bachelor's, master's and doctorate degrees.

**Includes the master's and doctorate degrees.

Table 3.2

COMPOSITION OF SAMPLES BY AGENCY LEVEL

Agency level	HumRRO	DFS
Caseworker	84.7%	73.5%
Supervisor	12.0%	12.9%*
Administrator	3.3%	13.6%

*DFS's income maintenance supervisors at level I are assumed to correspond to HumRRO's supervisors.

have DFS counterparts. The three excluded dimensions are:

1. Leadership perception
2. Leadership style
3. Goals-methods emphasis

HumRRO's "cohesiveness" and "group interaction" dimensions correspond jointly to DFS's 082 scale (i.e., SC 082); for purposes of comparison, the two HumRRO dimensions are grouped under the heading of "group interactions."

The comparisons between the HumRRO and DFS studies appear in Fig. 3.1 on the next page. While all DFS respondent groups appear on this figure, Income Maintenance caseworkers and supervisors are most comparable with the HumRRO results; attention should therefore center, for the DFS side of the comparisons, on these two groups.

In interpreting the contents of Fig. 3.1, it is useful to remember that as values increase from 1 to 5 for HumRRO dimensions, perceived climate is assumed to become more favorable; this situation is reversed when the dimension of control is considered (control is the only exception). Except as noted on the figure, the DFS and HumRRO results have the same scaling interpretation.

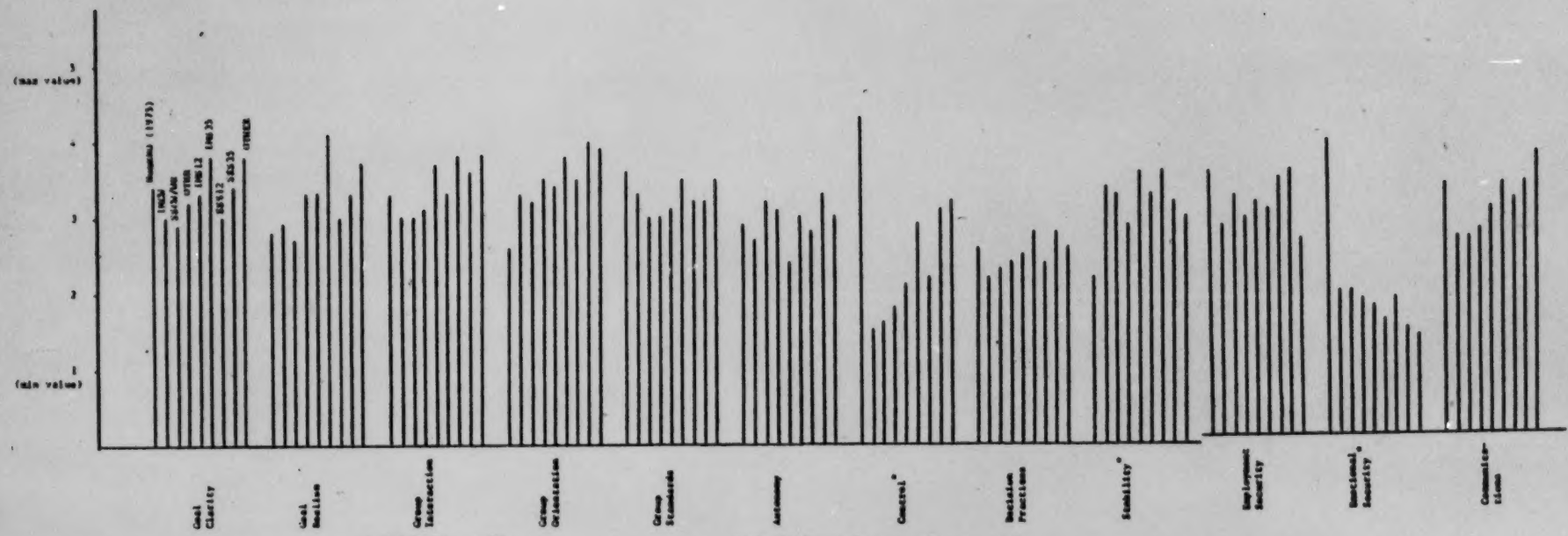
Data on the HumRRO dimensions come from Fig. 3 (p 15, Volume I) of HumRRO's "Effects of Work Contexts in Public Welfare Financial Assistance Agencies" study (1975). Their specific counterparts on the DFS survey are identified in Table 3.3 below.

Table 3.3

DFS SURVEY QUESTIONS ASSOCIATED WITH
HUMRRO'S SET OF AGENCY CLIMATE DIMENSIONS

DFS Supervisor	Dimension	DFS Caseworker
2.90, 2.91, 2.92	Goal clarity	2.91, 2.92, 2.93
2.94	Goal realism	2.95
2.61, 2.62, 2.63	Group interaction	2.63, 2.64, 2.65
2.14, 2.15	Group orientation	2.14, 2.15
2.27, 2.28, 2.29	Group standards	2.27, 2.28, 2.29
2.65, 2.66, 2.67, 2.68	Autonomy	2.67, 2.68, 2.69
2.69, 2.70	Control	2.70, 2.71
2.76	Decision practices	2.77
2.50, 2.51, 2.52	Stability	2.52, 2.53, 2.54
2.47	Employment security	2.49
2.48, 2.49	Emotional security	2.50, 2.51
2.77 to 2.89	Communications effectiveness	2.78 to 2.90

Fig. 3.1—Comparison of the HumRRO Study of Public Welfare Financial Assistance Agencies (1973) and the 1976 Survey of DFS Caseworkers and Supervisors



*On this dimension the scoring on the HumRRO study is the opposite of that on the DFS survey; see text for further elaboration.

HumRRO (1973): HumRRO Results
INCM: DFS/Income Maintenance Caseworkers
SSCW/WR: DFS/Social Services Personnel
OTHR: DFS/Other Caseworkers

INS12: DFS/Income Maintenance Supervisors 1,2
INS35: DFS/Income Maintenance Supervisors 3,5
SSS12: DFS/Social Service Supervisors 1,2
SSS35: DFS/Social Service Supervisors 3,5
OTHER: DFS/Other Supervisors

The contents of Fig. 3.1 are largely self-explanatory and will therefore not be discussed in detail. In general terms, HumRRO respondents tend to have more favorable perceptions than do DFS income maintenance caseworkers; of the 12 dimensions, HumRRO respondents report more favorable perceptions on 8.

This situation is reversed, however, when DFS income maintenance supervisors are considered. At the I and II supervisory levels, DFS respondents report more favorable perceptions on 6 of Fig. 3.1's dimensions (there are 2 dimensions on which HumRRO and DFS personnel are similar, thus giving the latter respondents a more favorable overall set of responses). At the III to V levels, DFS respondents report more favorable perceptions on 7 of these 12 dimensions.

Additional Descriptive Comparisons

In addition to the 12 organizational dimensions contained in Fig. 3.1, the HumRRO study presents results which reflect various aspects of work satisfaction. Of the 9 measures discussed, 8 have counterparts in the DFS study. A comparison of these results appears in Table 3.4 below.

Table 3.4

COMPARISON OF EIGHT DIMENSIONS OF PERSONNEL SATISFACTION

Dimension	Humrro*	DFS**
Satisfaction with work	3.45	3.53
Satisfaction with pay	2.62	2.70
Satisfaction with job	3.55	3.40
Satisfaction with coworkers	4.18	3.81
Satisfaction, growth potential	2.63	2.26
Satisfaction with supervisors	4.00	3.49
Satisfaction, working conditions	2.60	2.89
Global satisfaction	2.95	3.09

*Data from HumRRO's 1975 report, p 26, Vol I.

**The DFS data are weighted averages of DFS income maintenance caseworker and supervisors. Weight factors are given in Table 3.2 above.

HumRRO respondents report greater satisfaction on 4 of these 8 dimensions. DFS respondents, on the other hand, report greater satisfaction on the important work, pay and global dimensions.

Comments on HumRRO's Summarized Findings on Agency Climate

This section comments on HumRRO's summarized findings found at the beginning of Chap. 6 (pp 70-72) of Vol II of their 1975 report on financial assistance agencies. Comments on these findings are given in outline form as follows:

1. HumRRO found that agency type (state-administered vs state-supervised) affected policy understanding.

   Comment: Since the DFS study involves only one agency type and and does not cover policy understanding in its questionnaires, it can neither support nor refute this finding.

2. HumRRO found that financial assistance agencies are moderately low to low on goal realism, orientation toward goal achievement, worker autonomy, decision practices, emphasis on goal achievement/good work methods, and stability of the work environment.

   Comment Emphasis on goal achievement and good social work methods is not covered by the DFS questionnaire. The DFS study cannot, therefore, either support or refute findings which involve these factors.

   Orientation toward goal achievement is moderately high to high for DFS respondents. This finding conflicts with its HumRRO counterpart.

   The DFS study supports the remainder of these HumRRO findings.

3. HumRRO found that financial assistance agencies are moderately high to high on goal clarity, policy understanding, supervision, leadership style, work group interactions, work group standards, employment security, emotional security, and communications effectiveness.

   Comments: Policy understanding and leadership style are not covered in the DFS survey; further comments on them will therefore not be made.

The DFS finding on communications effectiveness agrees with its HumRRO counterpart for I.M. supervisors. The same is not true for DFS's I.M. caseworkers.

DFS findings are in accord with the remainder of these HumRRO findings.

4. HumRRO found that financial assistance agencies are high with respect to formal controls.

Comment: After adjusting for differences in scaling, it is noted that the DFS study supports this HumRRO finding.

5. HumRRO found that agency size impacts upon climate within financial assistance agencies.

Comment: The DFS study does not conduct any of its analysis on the basis of agency size. It was found, however, that when the work-related perceptions of caseworkers are examined for variation by type of geographical location, more often than not rural area responses were more favorable than their urban responses. Within urban areas, responses from smaller areas were found to be more favorable than responses from large ones (see Table 4.9, Chap. 4). If office size tends to increase from rural-to-small urban-to-large urban areas, the DFS study provides at least partial support for this HumRRO finding.

6. HumRRO found that an agency's structural elements, other than size, affect only stability.

Comment: The kinds of structural elements that HumRRO refers to are not covered in the DFS survey; no further comments will therefore be made.

7. HumRRO found that supervisory effectiveness exerts considerable influence on agency climate.

Comments: The DFS study does not address the issue of supervisory effectiveness. It does, however, consider satisfaction with supervisors. Among its other findings, the DFS study found that communications effectiveness, involvement of agency personnel with their work and their agencies, and the motivation of personnel are directly related to satisfaction with supervisors. The same type of factors were found by HumRRO to be directly related to supervisory effectiveness. It seems possible, therefore, that the DFS study provides indirect, partial support for thie HumRRO finding.

COMPARISON OF THE CORRELATIONAL ANALYSIS OF THE HUMRRO (1975) STUDY WITH THE REGRESSION ANALYSIS OF THE DFS (1976) STUDY

While correlational and multivariate regression analyses differ in many respects, they do share the property that both seek to identify the existence of relationships between variables. Because of differences in both questionnaires and methods of data analysis, neither the HumRRO or DFS study is in a position to completely refute or support the other's conclusions.

After examining as many of the comparable conclusions as could be found, it was noted that the two studies at least partially support many of one another's findings. These comparisons are summarized in Table 3.5 below. Only regressions for DFS income maintenance caseworkers are involved.

Table 3.5

COMPARISONS OF THE ANALYTICAL FINDINGS OF THE DFS SURVEY WITH THOSE OF THE HUMRRO (1975) STUDY

	HumRRO (1975)	DFS (1976)*
1.	Attitudes, values and motivations in an agency are directly related to the clarity, realism, and relevance of agency goals.	Goal realism was found to be inversely related to the likelihood of leaving the agency. Since such a likelihood is probably inversely related to favorable attitudes, values and motivations, DFS findings support the HumRRO findings as they related to goal realism (Table 5.6 (2.95)).
2.	Attitudes, values and motivations in an agency are directly related to the extent to which work groups are cohesive and interactive.	DFS regression results support the findings concerning cohesiveness; none of the regression results involved group interaction (Table 5.2 (2.32), Table 5.6 (2.12)).
3.	Attitudes, values and motivations in an agency are directly related to the extent to which work groups have high standards for both quality and quantity of output.	DFS regression results support this finding (Table 5.2 (2.28), Table 5.4 (2.15), (2.99), Table 5.7 (2.28)).
4.	Attitudes, values and motivations in an agency are directly related to the extent to which the agency avoids placing undue constraints on its personnel (i.e., the concept of power and autonomy).	DFS regression results support this finding (Table 5.2 (2.67), Table 5.4 (2.67), Table 5.6 (2.66)).

Table 3.5 (continued)

	HumRRO (1975)	DFS (1976)
5.	Attitudes, values and motivations in an agency are directly related to the degree of stability that exists in the working environment.	DFS regression results support this finding as it pertains to caseworkers' attitudes toward pay (Table 5.3 (2.50)).
6.	Attitudes, values and motivations in an agency are directly related to the effectiveness of communications within an agency.	DFS regression results support this finding as it pertains to communications involving supervisors (Table 5.4 (2.88)).
7.	Employee satisfaction is directly related to the clarity, realism, and relevance of agency goals.	DFS regression results support this finding, especially with regard to clarity (Table 5.4 (2.88), (2.99)).
8.	Employee satisfaction is directly related to communications effectiveness within the agency.	DFS regression results support this finding as it pertains to communications involving supervisors (Table 5.4 (2.88)).
9.	Employee satisfaction is directly related to the cohesiveness and degree of interaction within the work groups.	To the extent that expectations of high performance levels are partially the result of peer pressure, DFS results would seem to provide partial support for this finding (Table 5.4 (2.15)).
10.	Employee satisfaction is directly related to the stability that exists within the agency.	DFS regression results support this finding as it applies to pay satisfaction (Table 5.3 (2.50)).

*Information appearing in ( ) identify the table in Chap. 5 that contains the regression in question, and the variable or variables that are involved.

While the HumRRO study presented a number of other findings, only these could be compared with regression results for DFS income maintenance caseworkers. With the exception of findings relating to agency structure or some aspect of leadership, other excluded findings involved factors that either were not covered by the DFS questionnaire or which did not enter the regression relationships as significant variables. Agency structure and issues of leadership represent subject matter not covered in the questionnaire.

Chapter 4

UNIVARIATE ANALYSIS OF THE SURVEY DATA— RESULTS FOR SUPERVISORS AND CASEWORKERS

BACKGROUND

The purpose of this chapter is to provide some straightforward descriptive data which summarizes the results of the organizational diagnostic survey conducted during the month of July 1976. Approximately 1200 personnel responded to the survey. Table 4.1 shows the number and percentage of surveys distributed by job title. An overall response rate of 85% is considered to be extremely good for surveys of this type and length (approximately 125 questions). Throughout this chapter results are provided for all of the 13 dimensions that were included in the survey. Information on dimensions 12 and 13, while available on tape, were inadvertently deleted from computer printouts. For this reason, these dimensions do not appear in any of the discussion or tables in Chapter 4. The term "dimension" has a very specific meaning as used in this survey. Dimension scores are basically composites of individual survey questions. The individual questions were designed to explore the attitudes, perceptions and evaluations of responding personnel in the Division of Family Services (DFS). The dimension scores are designed to reflect the same things but in a broader, more conceptual sense. Appendices C and E provide more detailed information on the precise question items used to derive each dimension score, which is basically the simple, unweighted mean score for all of the question items grouped under each specific dimension. A detailed description of the meaning of each dimension is also provided in the appendices along with copies of the actual surveys distributed in the field.

Based on discussions with Missouri project personnel, it was decided that dimension scores broken down by job title and region of the state would be most useful in evaluating results of the survey. The primary reason for this was to support the job and workload analyses studies with attitudinal data in order to provide greater insight into the organizational problems of the Division of Family Services. Another related but secondary interest

Table 4.1

SIZE OF DFS PERSONNEL SURVEY SAMPLE

No. of Supervisors Sampled, FJA	232
No. of Supervisors Sampled, ORG	299
Total No. Supervisors Sampled	531
No. of Supervisors in DFS[1]	664
% of DFS Supervisors Sampled[2]	80.0%
No. of Caseworkers Sampled, FJA	953
No. of Caseworkers Sampled, ORG	1104
Total No. of Caseworkers Sampled	2057
No. of Caseworkers in DFS[1]	2875
% of DFS Caseworkers Sampled[2]	71.5%

[1]From: Table 8, Monthly Administrative Analysis, Missouri Division of Family Services, Oct. 1976.

[2]This percentage of personnel sampled refers to personnel who received questionnaires and returned them completed.

was to discover if, in fact, sizable differences in dimension scores do exist by region of the state. Claims have been made that rural caseworkers and supervisors have more favorable job perceptions than their urban counterparts. Data provided in this chapter can be of assistance in documenting whether or not this hypotheses is true. In reading the material, caution should be exercised when attempting to draw causal inferences from the data. The information is primarily useful in that it provides an initial search in identifying problem areas in the organization and identifying potential relationships between various factors that further analysis may suggest are causally related.

PROCEDURE FOR RANKING DIMENSION SCORES

In examining and analyzing the dimension scores in this chapter, the need was perceived to translate raw scores associated with job title and region into some sort of ranking system. Without such a system, it was felt that any meaningful comparisons would be difficult to make.

The ranking system selected is based on the structure of the response scales. In all cases the extreme points of each dimension scale (i.e., values of 1 and 5) represent the most favorable and least favorable responses possible. For any comparison involving a number of groups, the group whose score lies closest to the most favorable end of the scale is ranked 1, and the group whose score lies closest to the least favorable end of the scale is ranked 5.

The resulting ranking of groups represents their relative positions with respect to one another. While there is a tendency in surveys of this type for respondents to cluster themselves within certain ranges of the scale, responses can be expected to be scattered along the entire continuant of the scale. Thus, the only way a reader can determine the specific degree of favorableness of a group is to refer to the table with raw dimension values.

While the ranking procedure is reasonably straightforward, inferences drawn from the rank order should be done with caution, noting that mean score differences on some dimensions might be quite small (less than 5 percent). Tests of statistical significance of the differences in such mean scores were not conducted. Considering the size of the samples involved and the variance around those mean scores, rankings based on differences in mean scores of less

than 5 percent should be considered questionable.

In a similar vein, whenever dimension scores had to be combined to form a group score simple arithmetic means were used. It is recognized that weighted means (i.e., weighted by the proportion of the entire sample identifying themselves by job title) could yield different results.

USE OF LIKERT's MANAGEMENT STRUCTURE CLASSIFICATION SCHEME

As the term "management structure" is often used, it refers to the authoritarian nature of the organization. The specific classification scheme employed differs among the various schools of organizational theory, but all reflect the varying degrees to which authority passes strictly from higher hierarchical levels to lower ones. Rather than review all of these schools and evaluate their methods of classifying management structures, it was decided to use the scheme presented by Rensis Likert.[1/]

Likert's classification methodology was selected for two reasons:

- Likert utilizes the responses to survey questions to classify an organization. The questions which appear on this survey are of the same form as the ones which appear on the Missouri (1976) survey. Both surveys are administered to members of the organization under study.
- Likert uses four categories and these range from the most authoritarian hierarchy possible (i.e., an organizational dictatorship) to one characterized by a high degree of superior-subordinate interaction in decision making (i.e., participative management).

The organizational categories in question are as follows:

- Exploitive authoritarian (System I): highly authoritarian, with little superior-subordinate cooperation.
- Benevolent authoritative (System II): moderately authoritarian, with improved superior-subordinate cooperation.
- Consultive (System III): moderately participative in nature, with generally favorable superior-subordinate relations.
- Participative (System IV): highly participative with generally excellent superior-subordinate relations.

[1/] Rensis Likert, The Human Organization, Its Management and Value, New York: McGraw-Hill, 1967.

Readers wishing to consult a more detailed presentation of Likert's questions and classification methodology should consult his text.[2/] Since the current analysis is based on Missouri's (1976) dimension scores, only those questions which relate to these dimensions could be considered. Closer examination of these questions revealed that the relevant dimension scores could be substituted in their place. The result is an approximation of Likert's organizational analysis.

Before proceeding with the analysis, it should be noted that each of Likert's survey questions allows for one of 20 responses; the Missouri (1976) survey has questions that allow for one of five responses. Since the four organizational categories are defined in terms of ranges of question scores, these ranges had to be redefined for current application. For dimensions in which there is a direct relationship between scores and the degree of favorable perceptions (DIM01, DIM02, DIM08, DIM09, DIM10), the ranges are as follows:

Organizational category	System 1	System 2	System 3	System 4
Range	1.0 - 1.9	2.0 - 2.9	3.0 - 3.9	4.0 - 5.0

For dimensions in which there is an inverse relationship between scores and the degree of favorable perceptions (DIM04, DIM06, DIM07), the ranges are as follows:

Organizational category	System 1	System 2	System 3	System 4
Range	4.1 - 5.0	3.1 - 4.0	2.1 - 3.0	1.0 - 2.0

While discussing the implementation of his system, Likert refers to a list of questions that are generally similar to questions which appear on the caseworker/supervisor survey; there are, however, certain differences in these lists. Dimensions 1 to 11 were compared with the Likert (question) list and only those dimensions which could be matched were included in the Table. By this criteria, DIM03, DIM05 and DIM11 were excluded (no matches could be made for them with any certainty).

[2/] Likert, op.cit., see Chap. 3.

It should be noted that the conversion scales used in transforming dimension scores to corresponding Likert management systems involve rounding the former (i.e., dimension scores) to the first decimal place. This was done to expedite the current study's analysis; in future work, if study resources permit, a more detailed approach could be used (see Chapter 3 of the referenced Likert text for details). It should also be noted that the range of dimension scores associated with System 4 is larger than those associated with the other Systems.

Since the existing range of dimension scores cannot be subdivided into 5 equal (mutually exclusive) subintervals when they are to be rounded to the first decimal place, one interval was made slightly larger than the rest. This approach led to four ranges whose magnitudes equal 1.0 units, and one range whose magnitude equals 1.1 units. The largest range was assigned to System 4 since: (1) the occurrence of this category is often fairly rare; (2) given the probable scarcity of System 4 observations, assigning the larger range to them would both increase their likelihood of being detected, and avoid distortions that might arise if the larger scale was assigned to one of the more frequently occurring Systems. On examining the data, the assumed scarcity of System 4 cases proved to be correct (only one such case was found) and distortions among the more frequently occurring Systems 2 and 3 cases were thus avoided (since no System 1 cases occur in the dimensions under consideration, no distortion could arise from this System).

COMPARISON OF WORK-RELATED PERCEPTIONS IN LARGE CITY AREAS WITH SMALL CITY AREAS, SUPERVISORS

In order to assess the perceptions of various types of supervisors in large and small city locations, Tables 4.2 and 4.3 were prepared. The type of supervisors are:

- Income maintenance and social services supervisors at the III to V levels plus the "OTHR" (or "other") supervisor category; S350 denotes this group.
- Income maintenance supervisors at the I and II levels; IMS12 denotes this group.
- Social services supervisors at the I and II levels; SSS12 denotes this group.

Data in Table 4.2 is of two types:

- Group mean (arithmetic)
- Group's standard deviation (in parenthesis)

The comparisons made in Table 4.3 are based on the contents of Table 4.2. When comparing location types for a given dimension, all supervisor dimension scores associated with each location were added, and their average value obtained. Ranking of large and small city areas was then accomplished by comparing the areas average scores. Thus, for example, the average DIM01 values for large and small city areas are 2.96 and 3.31, respectively. Given the manner in which DIM01 is scaled, small city areas possess the most favorable score.

Comparisons between supervisor types are made in a similar manner. For a particular dimension, small city and large city scores for a given supervisor type are added and their average value obtained. The average scores for the three types of supervisors are then compared and they are then ranked accordingly. For example, the average DIM01 scores for S350, IMS12 and SSS12 are 3.37, 2.92 and 3.12; ranking of supervisor categories are based on these scores.

The various dimensions have been scored in such a way that increasing dimension scores reflect increasingly favorable work perceptions. There are four exceptions to this:

- DIM04: Job Pressure;
- DIM05: Role Overload;
- DIM06: Stability, Work Environment
- DIM07: Alienation.

For these dimensions, increasing dimension scores reflect increasingly unfavorable work perceptions.

As used in Table 4.2, small city areas refer specifically to Buchanan, Green and Jasper counties. Large city areas include the city and county of St. Louis and Jackson county, which contains Kansas City.

Comparison of Large and Small City Locations

Table 4.4 lists those dimensions in which large and small city areas rank most favorably in terms of supervisors' perceptions.

Table 4.2

DIMENSION SCORES BY SUPERVISOR CATEGORY AND LOCATION:
LARGE CITY AREAS VS SMALL CITY AREAS

	Supervisors III-V Others (S350)	IMS I,II (IMS12)	SSS I,II (SSS12)
	DIM01: Job Satisfaction		
Small city	3.36 (.13)	3.17 (0.51)	3.40 (0.59)
Large city	3.37 (.53)	2.66 (0.51)	2.84 (0.48)
	DIM02: Job Motivation		
Small city	3.25 (.35)	3.70 (0.69)	3.95 (0.51)
Large city	3.92 (.60)	3.11 (0.63)	3.48 (0.53)
	DIM03: Work Organization		
Small city	2.50 (.35)	3.07 (0.57)	2.91 (0.49)
Large city	3.13 (.42)	2.93 (0.68)	3.15 (0.55)
	DIM04: Job Pressure		
Small city	3.00 (0.0)	3.52 (0.70)	3.25 (0.77)
Large city	3.22 (0.84)	3.02 (0.81)	3.14 (0.68)
	DIM05: Role Overload		
Small city	2.75 (0.35)	2.23 (0.47)	2.20 (0.63)
Large city	2.25 (0.75)	2.60 (0.70)	2.36 (0.79)
	DIM06: Stability of Work Environment		
Small city	2.83 (0.24)	2.94 (0.55)	2.94 (0.68)
Large city	3.02 (0.83)	3.18 (0.77)	3.42 (0.65)
	DIM07: Alienation		
Small city	3.00 (0.0)	2.75 (0.89)	2.73 (0.79)
Large city	2.45 (0.76)	3.21 (0.74)	3.30 (0.70)
	DIM08: Group Relations		
Small city	4.00 (0.0)	3.95 (0.52)	4.20 (0.26)
Large city	4.16 (0.47)	3.49 (0.88)	3.75 (0.76)
	DIM09: Power and Autonomy		
Small city	3.30 (0.14)	2.69 (0.65)	3.58 (0.76)
Large city	3.51 (0.67)	2.88 (0.62)	2.93 (0.54)

Table 4.2 (continued)

	Supervisors III-V Others (S350)	IMS I,II (IMS12)	SSS I,II (SSS12)
	DIM10: Communications		
Small city	3.23 (0.18)	3.30 (0.67)	3.68 (0.68)
Large city	3.86 (0.55)	3.25 (0.47)	3.38 (0.42)
	DIM11: Organizational Goal Clarity/Realism		
Small city	3.83 (0.24)	3.67 (0.63)	3.73 (1.01)
Large city	4.10 (0.70)	3.25 (0.96)	3.03 (0.89)

Data in ( ) indicates the standard deviation for its cell.

Note: Information on DIM12 and DIM13 were not available from the computer printouts. For this reason, these dimensions do not appear in any of the tables of Chapter 4.

Table 4.3

COMPARISONS OF LOCATION AND SUPERVISOR CATEGORIES

Dimension	Comments
DIM01 (Job Satisfaction)	Small city supervisors are generally more satisfied with their jobs than are their large city counterparts. S350 supervisors are more satisfied than SSS12 supervisors; SSS12 supervisors are more satisfied than their IMS12 counterparts.
DIM02 (Job Motivation)	Small city supervisors are generally more motivated than are their large city counterparts. SSS12 supervisors are more motivated than S350 supervisors; S350 supervisors are more motivated than their IMS12 counterparts.
DIM03 (Work Organization)	Large city supervisors have activities that are generally more structured than those of their small city counterparts. SSS12 supervisors experience similar organization as do IMS12 supervisors; both experience greater organization than do S350 supervisors.
DIM04 (Job Pressure)	Small city supervisors generally experience more job pressure than their large city counterparts. IMS12 and SSS12 experience similar levels of job pressure; S350 supervisors have less pressure than SSS12 or IMS12.
DIM05 (Role Overload)	Difficulty with daily activities is similar for large city and small city supervisors. S350 supervisors experience similar difficulty to IMS12 supervisors; both experience greater difficulty than do SSS12 supervisors.
DIM06 (Stability of Work Environment)	Large city supervisors have a generally less stable working environment than do their small city counterparts. SSS12 supervisors experience greater instability than do IMS12 supervisors; IMS12 supervisors experience greater instability than do S350 supervisors.

Table 4.3 (continued)

Dimension	Comments
DIM07 (Alienation)	Large city supervisors generally experience greater alienation than do their small city counterparts. SSS12 supervisors experience similar alienation to IMS12 supervisors; both experience greater alienation than do S350 supervisors.
DIM08 (Group Relations)	Small city supervisors report a higher level of group unity than do their large city counterparts. The unity experienced by S350 supervisors is greater than that of SSS12 supervisors; both experience greater unity than do IMS12 supervisors.
DIM09 (Power and Autonomy)	Small city supervisors appear to have slightly greater perceptions of power and autonomy than do their large city counterparts; both lie on the moderately favorable portion of the response scale, however. S350 supervisors perceive greater personal power than do SSS12 supervisors; SSS12 supervisors perceive greater personal power than do IMS12 supervisors.
DIM10 (Communications)	The quality of office communications is perceived as being higher by large city supervisors than by their small city counterparts. Both supervisor groups lie in the favorable portion of the response scale, however. Communications are perceived in a similar light by S350 and SSS12 supervisors; their perception of communications quality is higher than that of IMS12 supervisors.
DIM11 (Organizational Goal Clarity/Realism)	Small city supervisors perceive a higher level of goal clarity/realism than do their large city counterparts. S350 supervisors perceive greater goal clarity than do IMS12 supervisors; IMS12 supervisors perceive similar goal clarity to SSS12 supervisors.

Small city areas score most favorably on more dimensions than do large city areas. Furthermore, the former type of area scores most favorably with respect to both job satisfaction and job motivation. One may conclude, therefore, that supervisors in small city areas appear to possess more favorable work perceptions than do their large city counterparts.

Table 4.4

LOCATIONS ASSOCIATED WITH MOST FAVORABLE DIMENSION SCORES

Small city area	Large city area
DIM01: Job Satisfaction	DIM03: Work Organization
DIM02: Job Motivation	DIM04: Job Pressure
DIM05: Role Overload	DIM05: Role Overload
DIM06: Stability, Work Environment	DIM10: Communications
DIM07: Alienation	
DIM08: Group Relations	
DIM09: Power and Autonomy	
DIM11: Goal Clarity/Realism	

Several points deserve greater elaboration. Previous studies have shown that job satisfaction and job productivity may be positively related.[1/] Small city supervisors, in such an event, would not only be favorably disposed to their jobs; they would also be the more productive.

Why do small city areas possess as many favorable dimensions as they do? A partial answer is found in the association of job satisfaction with this type of area. Previous studies have shown that satisfaction is related to attitudes, job content, autonomy, and psychological need satisfaction. The dimensions associated with small city areas (in Table 4.4) reflect such considerations.[2/] That they should be associated with these areas is therefore not surprising.

[1/] Srivasta, et al., Job Satisfaction and Productivity, Case Western Reserve University, Cleveland, Ohio, 1975.

[2/] Srivasta, et al., op. cit.

Acceptable levels of job pressure, and adequate communications, are both important in insuring job satisfaction; the nature and significance of their roles are discussed elsewhere.[1/] That communications are perceived as being superior in large city areas may in part be due to the availability of better communications facilities in such areas. Recent developments in St. Louis, which is Missouri's largest large city area, may also be involved.

Efforts are currently underway to streamline DFS activities in the St. Louis area. The increased organizational structuring, specialization, and standardization which results may well make intra-agency communications easier. They probably also account for the association of DIM03 (Work Organization) with large city areas (the dominance of St. Louis in such areas would account for this).

In a similar vein, work standardization can go far in eliminating work-related ambiguity. Since such ambiguity contributes to high levels of job pressure,[2/] its reduction would also tend to reduce perceived job pressure (i.e., DIM04). Lower levels of perceived job pressure in large city areas might, therefore, be expected.

Comparison of Supervisor Categories

Tables 4.5 and 4.6 rank the supervisor categories for each dimension and type of location. This ranking is based on the assumed relationships between the scoring of dimensions and their implications for supervisors' work perceptions. A rank of "1" denotes the most favorable sort of impact; a rank of "3" denotes the least favorable sort of impact.

[1/] See C. Maslach, "Helping the Troubled; the Costs of Involvement," and Churchill, et al., "Organizational Climate and Job Satisfaction in the Sales Force," Journal of Marketing Research, Nov. 1976.

[2/] See Churchill, et al., op. cit., for discussion of the role that structuring of activities can play in job satisfaction.

Table 4.5

RANKING OF SUPERVISOR CATEGORIES FOR SMALL CITY LOCATIONS

	Supervisors III, V Other	IMS I,II	SSS I,II
DIM01	2	3	1
DIM02	3	2	1
DIM03	3	1	2
DIM04	1	3	2
DIM05	3	2	1
DIM06	1	2	2
DIM07	3	2	1
DIM08	2	3	1
DIM09	2	3	1
DIM10	3	2	1
DIM11	1	3	2

Table 4.6

RANKING OF SUPERVISOR CATEGORIES FOR LARGE CITY AREAS

	Supervisors III, V Other	IMS I,II	SSS I,II
DIM01	1	3	2
DIM02	1	3	2
DIM03	2	3	1
DIM04	3	1	2
DIM05	1	3	2
DIM06	1	2	3
DIM07	1	2	3
DIM08	1	3	2
DIM09	1	3	2
DIM10	1	3	2
DIM11	1	2	3

In small city areas, social service supervisors I, II experience the most favorable overall job perceptions; supervisors at the III level and above experience the second most favorable job perceptions. In large city areas, the reverse ordering applies. Income maintenance supervisors I, II have the least favorable perception in either small city or large city settings.

As was noted earlier, favorable levels of job satisfaction (DIM01) are often related to the remaining dimensions under current consideration. Tables 4.5 and 4.6 reveal that a supervisory category's ranking with respect to DIM01 corresponds to its ranking when all dimensions are considered.

CONCLUSIONS

It should be noted that the following conclusions apply only to small and large city areas, as these areas are defined above. Other counties are considered in subsequent chapters involving urban/suburban and rural county comparisons; separate conclusions are given in these chapters.

- When all dimensions are considered, supervisors operating in small city areas appear to have somewhat more favorable work perceptions than do their large city counterparts (see Table 4.4).
- In small city areas, social service supervisors I, II have the most favorable work perceptions; supervisors III, V have the second most favorable perceptions. In large city areas, this order is reversed. Clearly, there is a location effect among these supervisor categories (see Tables 4.5 and 4.6).
- In both large city and small city areas, income maintenance supervisors I, II have the least favorable perceptions of their working environment (see Tables 4.5 and 4.6).
- The ranking of a supervisor category with respect to DIM01 (i.e., Job Satisfaction) will correspond to that category overall ranking when all dimensions are considered (see Tables 4.5 and 4.6).
- A concise summary of the empirical data for each dimension is found in Table 4.3.

COMPARISON OF WORK-RELATED PERCEPTIONS IN LARGE CITY AREAS VS SMALL CITY AREAS: CASEWORKERS

The questions which are contained in the Missouri (1976) organizational survey are intended to reveal the attitudes, perceptions and evaluations that DFS caseworkers have toward their work. These questions are in turn aggregated into scales; scales and questions are aggregated into dimensions. Since dimension scores provide a concise summary of the survey's results, it is this data (as opposed to individual questions and/or scales) that appear in Table 4.7. The data are provided for each type of location and caseworker. They consist of:

1. The average dimension score (arithmetic mean) for a given pair of location and caseworker types.

2. The standard deviations of the mean scores (contained in parentheses). The standard deviation data are included for the benefit of the interested reader; time limitations precluded their consideration in the discussion which follows.

Since dimensions are derived from survey questions, they, too, should reflect work-related attitudes, evaluations and perceptions. For the sake of brevity, these characteristics will subsequently be referred to by the term "perceptions."

Seven of the eleven dimensions have been scored so that increasing scores reflect increasingly favorable work perceptions. The remaining dimensions have been scored so that increasing scores reflect increasingly unfavorable work perceptions. These latter dimensions include:

- DIM04: Job pressure
- DIM05: Role overload
- DIM06: Stability, work environment
- DIM07: Alienation

This discussion of the relationship between scoring and perceptions is relevant to the ranking schemes to be discussed later.

As used in Table 4.7, small city areas refer specifically to Buchanan, Green and Jasper counties. Large city areas include the city and county of St. Louis and Jackson county, which contains Kansas City.

Table 4.7

DIMENSION SCORES BY CASEWORKER CATEGORY AND LOCATION: LARGE CITY AREA VS SMALL CITY AREA

Dimension description, location type	Income maintenance caseworkers	Social service workers	Social service caseworkers	Social service workers and caseworkers	"OTHER" caseworkers
DIM01: Job satisfaction					
Small city	2.86(0.60)	3.10(0.43)	3.03(0.52)	3.07(0.47)	3.32(0.57)
Large city	2.56(0.62)	2.90(0.66)	2.67(0.52)	2.77(0.60)	2.96(0.68)
DIM02: Job motivation					
Small city	3.38(0.63)	3.87(0.60)	3.37(0.56)	3.63(0.62)	4.19(0.62)
Large city	3.04(0.72)	3.66(0.64)	3.44(0.68)	3.53(0.67)	3.61(0.80)
DIM03: Work organization					
Small city	3.07(0.81)	3.02(0.50)	3.21(0.47)	3.11(0.48)	3.53(0.89)
Large city	3.09(0.75)	3.17(0.61)	3.15(0.67)	3.16(0.64)	3.70(0.77)
DIM04: Job pressure					
Small city	3.38(0.69)	3.45(0.57)	2.79(0.84)	3.14(0.77)	3.16(1.18)
Large city	3.10(0.76)	3.14(0.68)	3.02(0.67)	3.07(0.67)	2.95(1.07)
DIM05: Role overload					
Small city	2.25(0.63)	1.83(0.56)	1.96(0.59)	1.89(0.57)	2.50(0.87)
Large city	2.53(0.61)	2.51(0.72)	2.16(0.74)	2.31(0.75)	2.49(0.86)
DIM06: Stability of work environment					
Small city	3.04(0.70)	3.00(0.80)	2.92(0.77)	2.96(0.77)	3.29(1.13)
Large city	3.19(0.75)	3.29(0.87)	3.41(0.76)	3.36(0.81)	2.83(0.78)
DIM07: Alienation					
Small city	3.26(0.83)	2.67(0.70)	3.10(0.80)	2.87(0.77)	3.44(1.07)
Large city	3.53(0.69)	3.43(0.71)	3.47(0.70)	3.45(0.70)	3.01(0.77)
DIM08: Group relations					
Small city	3.14(0.94)	3.47(0.72)	3.42(0.81)	3.45(0.75)	3.00(1.15)
Large city	2.97(0.90)	3.18(0.90)	3.03(0.85)	3.10(0.87)	3.40(0.92)
DIM09: Power and autonomy					
Small city	2.46(0.58)	2.85(0.53)	2.82(0.47)	2.84(0.49)	2.74(0.51)
Large city	2.58(0.59)	2.82(0.59)	2.68(0.56)	2.74(0.58)	2.87(0.70)
DIM10: Communications					
Small city	2.75(0.65)	3.20(0.68)	2.77(0.64)	3.00(0.68)	2.89(0.79)
Large city	2.69(0.69)	2.80(0.66)	2.80(0.59)	2.80(0.62)	3.09(0.95)
DIM11: Organizational goal clarity/realism					
Small city	3.08(0.91)	3.58(0.75)	2.92(0.76)	3.27(0.81)	3.90(0.92)
Large city	2.79(0.82)	2.84(0.89)	2.62(0.92)	2.72(0.91)	3.37(0.99)

Figures in ( ) denote standard deviations.

Comparison of Small City and Large City Locations

In order to compare small city and large city areas over all caseworker types, mean dimension scores were employed. These means were obtained for each dimension and location by taking the arithmetic average of the related scores of all the caseworker categories.

For each dimension, the average small city score was compared with its large city counterpart. The area which ranks most favorably is the one with the most favorable score. Results of this comparison appear in Table 4.8.

Table 4.8

LOCATIONS ASSOCIATED WITH MOST FAVORABLE DIMENSION SCORES

Small City Area		Large City Area	
DIM01:	Job satisfaction	DIM03:	Work organization
DIM02:	Job motivation	DIM04:	Job pressure
DIM05:	Role overload	DIM09:	Power and autonomy
DIM06:	Stability, work environment		
DIM07:	Alienation		
DIM08:	Group relations		
DIM09:	Power and autonomy		
DIM10:	Communications		
DIM11:	Organizational goal clarity/ realism		

It is instructive to compare the results of this table with those of Table 4.4, its counterpart for DFS supervisors. The dimensions most favorably associated with the two types of areas are almost identical in both tables. This finding suggests that both caseworkers and supervisors who live in small city areas generally have more favorable work perceptions than do their counterparts in large city areas.

While a number of factors could probably account for the similarities between Tables 4.4 and 4.8, two plausible ones come immediately to mind. The first involves the nature of small city and large city areas. While

both offer the conveniences of city living, the latter presents greater problems for those in social welfare work (e.g., more complicated and uncontrollable socioeconomic conditions); depending on the individuals involved, the congestion and inconvenience of moving about in a large city can also have a negative influence. Since such environmental considerations affect both supervisors and caseworkers in much the same way, both may tend to react more favorably to small city locations and their attendant characteristics.

The second factor involves the nature of the relationships that exist between supervisors and caseworkers. To the extent that the perceptions of supervisors affect those of their caseworkers, the results of Table 4.8 follow (in a sense) from those of Table 4.4. Whether or not such causal relationships exist is debatable. It is interesting to note, however, that on a scale of 1 to 5, DIM09 (Power and Autonomy) always assumes values less than 3 (the mid-point of the range) for all caseworkers groups. Since such scores lie in the lower half of the perceived power and autonomy range, it might be argued that caseworkers could be influenced by the perceptions of their supervisors.

Differences Between Tables 4.4 and 4.8

Of the differences that exist between these tables, the most easily accounted for involves the association of DIM09 (Power and Autonomy) with both small city and large city caseworkers. Caseworkers are primarily involved with their clients; the degree of discretion they possess is determined by the nature of their jobs (i.e., income maintenance, social service, other) and possibly by the particular supervisors they work for. There is little reason to suspect that geographical location exerts any sort of effect on DIM09. Since supervisors' activities are affected by hierarchical considerations, it is similarly not surprising to find that location appears to have an effect on them. Thus, DIM09 is common to both large and small city areas in Table 4.8 but is not shared in Table 4.4.

A second difference involves the transfer of DIM10 from large city to small city areas when attention shifts from supervisors to caseworkers. This switch may, perhaps, be accounted for by the types of communication

(DIM10 relates to communications) that supervisors and caseworkers engage in. Caseworkers are most involved with their clients and immediate supervisors. In small city areas these persons are probably easier to locate and communicase with; the sheer size of large city areas makes such tasks more difficult. DIM01 is, therefore, associated with small city areas in Table 4.8.

Supervisors are involved with their caseworkers, colocated fellow supervisors, and possible with agency officials in other areas. The communication, transportation and centralized administrative (local) facilities found in large city areas may make their communications tasks easier. DIM10 is, therefore, associated with large city areas in Table 4.4.

Finally, Table 4.4 indicates that the DIM05 scores of large city and small city supervisors are quite similar. This is not true of caseworkers (see Table 4.8), where those working in small city areas have less difficulty in coping with the clients, documentation, referrals, etc., than do their large city counterparts. The differential impact that location apparently has is perhaps again accounted for by the variation that exists between caseworkers' and supervisors' jobs. As noted in regard to DIM10, caseworkers/workers are more intimately involved with clients than are their superiors, and the complexities of large city life (e.g., social, economic) may make the former's tasks more difficult.

Significance of Job Satisfaction (DIM01) and Work Organization (DIM03)

The significance of job satisfaction and its relationships with the other dimensions has already been discussed in the preceding section in regard to Table 4.4. The contents of Table 4.8 reinforce the notion that increasing levels of job satisfaction tend to be accompanied by favorable scores on other survey dimensions; this conclusion is empirically supported for both caseworkers and supervisors.

The organizational developments which have been occurring in St. Louis (these developments are discussed in conjunction with Table 4.4 in the preceding section) have apparently had similar effects on caseworkers and supervisors. In both cases, the increased levels of job structuring appear to have had a beneficial effect in terms of diminished job pressure and both are associated with large city areas. While the conclusions involving job structure and communications still apply, it is the caseworkers in small city areas who appear to benefit most as a result of the association of DIM10 with this type area.

Comparison of Caseworker Categories

In order to compare the various caseworker categories over both small city and large city areas, Tables 4.9 and 4.10 were prepared. Table 4.9

Table 4.9

RANKING OF CASEWORKER CATEGORIES BY DIMENSION

Dimension description	Income maintenance caseworkers	Social service workers	Social service caseworkers	Social service workers and caseworkers	"OTHR" caseworkers
DIM01: Job satisfaction	5	2	4	3	1
DIM02: Job motivation	5	2	4	3	1
DIM03: Work organization	5	4	2	3	1
DIM04: Job pressure	4	5	1	3	2
DIM05: Role overload	4	3	1	2	5
DIM06: Stability, work environment	2	3	5	4	1
DIM07: Alienation	5	1	4	2	3
DIM08: Group relations	5	1	3	2	4
DIM09: Power and autonomy	5	1	4	3	2
DIM10: Communications	5	1	4	3	2
DIM11: Organizational goal clarity/realism	4	2	5	3	1

Table 4.10

RANKING OF CASEWORKER CATEGORIES IN SMALL CITY AND LARGE CITY AREAS

Location, dimension	Income maintenance caseworkers	Social service workers	Social service caseworkers	"OTHR" caseworkers
SMALL CITY				
DIM01	4	2	3	1
DIM02	3	2	4	1
DIM03	3	4	2	1
DIM04	3	4	1	2
DIM05	3	1	2	4
DIM06	3	2	1	4
DIM07	3	1	2	4
DIM08	3	1	2	4
DIM09	4	1	2	3
DIM10	4	1	3	2
DIM11	3	2	4	1
LARGE CITY				
DIM01	4	2	3	1
DIM02	4	1	3	2
DIM03	4	2	3	1
DIM04	3	4	2	1
DIM05	4	3	1	2
DIM06	2	3	4	1
DIM07	4	2	3	1
DIM08	4	2	3	1
DIM09	4	2	3	1
DIM10	4	2	2	1
DIM11	3	2	4	1

ranks these categories without regard to type of location. The ranking procedure used consists of obtaining average dimension scores for each dimension and caseworker type (averaging was done over the corresponding small city and large city scores); the resulting scores are then ranked in terms of their impacts on favorable work-related perceptions. Table 4.9 appears on the following page. In both this and Table 4.10, a rank of "1" denotes the most favorable impact, a value of "5" denotes the least favorable impact.

When all dimensions are considered, the various categories are ranked in the following order:

1. "Other" types of caseworkers
2. Social service workers
3. Social service caseworkers
4. Income maintenance caseworkers

This ranking is obtained by generating the average rank of a category over all dimensions and then ranking the average ranks. Since the social service workers/caseworker category involves no new class of caseworker, it is omitted from the ranking.

Effects of Location on Caseworker Ranking

Since small city and large city caseworkers appear to differ in their work-related perceptions, an effort was made to see if the rankings of caseworker categories are affected by small city and large city settings. Table 4.10 summarizes this effort. The rankings shown in this table are based directly on data from Table 4.7. Since the composite "social service workers/caseworkers" category introduces no new caseworker type, it was omitted.

When all dimensions are considered, the various categories are ranked in the following table.

Table 4.11

RANKING OF CATEGORIES WHEN ALL DIMENSIONS ARE CONSIDERED BY AREA TYPE

Small City Area	Large City Area
1. Social service workers	1. "Other" caseworkers
2. Social service caseworkers	2. Social service workers
3. "Other" caseworkers	3. Social service caseworkers
4. Income maintenance caseworkers	4. Income maintenance caseworkers

The major effect of considering location is to switch the relative positions of "other" caseworkers and their social services counterparts (this statement considers social service workers and caseworkers as a block).

It is interesting to note that location type exerts no influence on the ranking of income maintenance caseworkers; they consistently rank last in favorable work perceptions. Within the social services area, social service workers consistently rank ahead of their caseworker counterparts.

That "other" caseworkers should reflect the most favorable overall work-related perceptions, when small city and large city areas are aggregated together, results from:

- the use of simple arithmetic means as composite dimension scores;
- the data itself.

"Other" caseworkers tend to have the most favorable dimension scores in both types of areas; the averaging process preserves this characteristic.

Job Satisfaction and Caseworker Rankings

Examination of Tables 4.9 and 4.10 reveals that a caseworker category's ranking with respect to job satisfaction (i.e., DIM01) generally corresponds to its ranking when all dimensions are considered. There is only one exception to this finding — ranking of caseworkers in small city areas. In this latter case, the categories' rankings with respect to DIM09 (Power and Autonomy) correspond to the rankings when all dimensions are considered.

Given the relationships that seem to exist (these relationships are neither necessarily causal or perfect) between DIM01 and the other dimensions, this finding is generally not surprising. As was noted in the preceding section, all supervisor categories in both small city and large city areas reflect this same correspondence between rankings with respect to job satisfaction and rankings with respect to all dimensions.

Small city caseworkers are, of course, an exception to this finding. The correspondence between rankings with respect to DIM09 (Power and Autonomy) and rankings with respect to all dimensions, in this case, is notable.

Previous studies [1/] have unearthed evidence which suggests that a

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[1/] See Srivasta, et al., Job Satisfaction and Productivity, Case Western Reserve University, Cleveland, Ohio, 1975, Chap. 2.

worker's job satisfaction is positively related to his/her autonomy. While such a relationship is obviously not perfect in this case (if it were, rankings with respect to DIM01 would match those of DIM09), its existence in a weaker form would suggest that small city caseworkers are perhaps not so different from other social welfare personnel in small city and large city areas.

Applying Likert's Theory of Management Systems to the DFS Survey's Results

Table 4.12 reflects the organizational structure perceived by income maintenance workers.

Table 4.12

ORGANIZATIONAL STRUCTURE PERCEIVED BY I.M. CASEWORKERS

Dimension	System 1	System 2	System 3	System 4
DIM01		U,M*		
DIM02			U,M	
DIM04		U,M		
DIM06		U,M		
DIM07		U,M		
DIM08		M	U	
DIM09		U,M		
DIM10		U,M		

*U denotes small city responses; M denotes large city responses.

Income maintenance workers perceive, therefore, that they are operating within a System 2 environment.

Table 4.13 reflects the organizational structure perceived by social service workers. Large city social service workers seem to feel that they are operating in close to a System 2 environment. Their small city counterparts, on the other hand, seem to feel that they are operating in close to a System 3 environment.

Table 4.13

ORGANIZATIONAL STRUCTURE PERCEIVED BY S.S. WORKERS

Dimension	System 1	System 2	System 3	System 4
DIM01		M*	U*	
DIM02			U,M	
DIM04		U,M		
DIM06		M	U	
DIM07		M	U	
DIM08			U,M	
DIM09		U,M		
DIM10		M	U	

*U denotes small city responses; M denotes large city responses.

Table 4.14 reflects the organizational structure perceived by social service caseworkers.

Table 4.14

ORGANIZATIONAL STRUCTURE PERCEIVED BY S.S. CASEWORKERS

Dimension	System 1	System 2	System 3	System 4
DIM01		M*	U*	
DIM02			U,M	
DIM04			U,M	
DIM06		M	U	
DIM07		U,M		
DIM08			U,M	
DIM09		U,M		
DIM10		U,M		

*U denotes small city responses; M denotes large city responses.

Both small city and large city workers seem to perceive their environments as lying between Systems 2 and 3. Large city caseworkers seem to lie closer to System 2; small city caseworkers seem to lie closer to System 3.

Table 4.15 reflects the organizational structure perceived by "other" caseworkers.

Table 4.15

ORGANIZATIONAL STRUCTURE PERCEIVED BY "OTHER" CASEWORKERS

Dimension	System 1	System 2	System 3	System 4
DIM01			U,M*	
DIM02			M	U
DIM04		U	M	
DIM06		U	M	
DIM07		U	M	
DIM08			U,M	
DIM09		U,M		
DIM10		U	M	

*U denotes small city responses; M denotes large city responses.

"Other" caseworkers also appear to lie between Systems 2 and 3. Those living in large city areas appear closer to System 3; those living in small city areas appear closer to System 2.

Income maintenance caseworkers perceive themselves as operating within a moderately authoritarian system. Social service workers/caseworkers in small city areas perceive their environment as moderately participative, while their counterparts in large city areas perceive a moderately authoritarian environment; the environments perceived by "other" caseworkers are the reverse of their social service counterparts. In evaluating these conclusions, one must remember that the Likert scheme assumes that supervisors can substantially control the nature of their relationships with subordinates. In government agencies, legislative restrictions can intervene. Whether a total System 4 structure, as defined by Likert, is possible under such circumstances is uncertain.

CONCLUSIONS

The following conclusions are based on data for small city and large city areas only. It is not intended that these conclusions be imputed to other types of areas.

- Caseworkers, as well as supervisors, who live in small city areas have generally more favorable work perception than do their counterparts in large city areas (see Tables 4.4 and 4.8).

- The role of power and autonomy in caseworker perceptions appears about the same in both small city and large city areas; this isn't the case with supervisors (see Tables 4.4 and 4.8).

- Unlike supervisors, caseworkers perceive that communications in small city areas are more favorable than are those in large city areas.

- When small city and large city areas are considered together, caseworkers are ranked, in terms of favorable perceptions, as follows:

  (1) "Other" types of caseworkers
  (2) Social service workers
  (3) Social service caseworkers
  (4) Income maintenance workers

(Order of rankings: 1 = most favorable; 4 = least favorable.)

- When small city and large city areas are considered separately, the ranking of personnel in large city areas is the same as when these areas are aggregated. Rankings in small city areas are, however, different:

  (1) Social service workers
  (2) Social service caseworkers
  (3) "Other" types of caseworkers
  (4) Income maintenance caseworkers

- A caseworker category's ranking with respect to job satisfaction corresponds to its ranking when all dimensions are considered. The exception to this involves small city caseworkers. Their overall ranking corresponds to their ranking in terms of DIM09 (power and autonomy); as noted above, prior studies suggest that autonomy and job satisfaction could be positively related.

- Organization types range from those that are highly authoritarian and regimented to those that are highly democratic and participative in nature. Rensis Likert refers to these extreme types as System 1 and System 4, respectively. Distributed evenly between these extremes are intermediate organizational types, System 2 (moderately authoritarian) and System 3 (moderately participative). Table 4.16 summarizes the organizational classification of each caseworker type.

Table 4.16

ORGANIZATIONAL CLASSIFICATION OF CASEWORKERS

Caseworker category	System type
Income maintenance	System 2
Social service workers (small city)	Close to System 3
Social service workers (large city)	Close to System 2
Social service caseworkers (small city)	Between Systems 2 and 3; appears closer to System 3
Social service caseworkers (large city)	Between Systems 2 and 3; appears closer to System 2
"Other" caseworkers (small city)	Close to System 2
"Other" caseworkers (large city)	Close to System 3

DEFINITION AND DISCUSSION OF URBAN/SUBURBAN AND RURAL AREAS

In order to facilitate the investigation of the impact that different types of geographical areas can have on work-related perceptions, the counties of Missouri have been divided into six distinct groups based on population, per capita income, and urban density data. More specifically, the purpose of subdividing the counties was twofold:

(1) to make sampling estimates for the survey that was given during July 1976 and

(2) to identify groups of counties with similar characteristics to be used as control and demonstration counties.

The six categories used in the analysis and the division of counties are given in Table 4.17.

- Large urban
- Suburban
- Small urban
- Large rural
- More affluent, rural
- Less affluent, rural

Table 4.17

CLASSIFICATION OF COUNTIES BY COUNTY TYPE, WITH EACH COUNTY BEING ASSOCIATED WITH THE LAST THREE DIGITS OF ITS FIPS CODE

(1) Small, less affluent, rural	(2) Small, more affluent, rural	(3) Large rural	(4) Small urban	(5) Suburban	(6) Large urban
Barry: 009	Andrew: 003	Adair: 001	Boone: 019	Buchanan: 021	Jackson: 095
Barton: 011	Atchison: 005	Audrain: 007	Cape Girardeau: 031	Cass: 037	St. Louis: 189
Benton: 015	Bates: 013	Butler: 023	Cole: 051	Clay: 047	St. Louis City: 510
Bollinger: 017	Carroll: 033	Callaway: 027	Greene: 077	Franklin: 071	
Caldwell: 025	Clinton: 049	Dunklin: 069	Jasper: 097	Jefferson: 099	
Camden: 029	Cooper: 053	Johnson: 101	Pulaski: 169	Platte: 165	
Carter: 035	Gasconade: 073	Lafayette: 107		St.Charles: 183	
Cedar: 039	Grundy: 079	Livingston: 117			
Chariton: 041	Holt: 087	Marion: 127			
Christian: 043	Lewis: 111	Newton: 145			
Clark: 045	Linn: 115	Nodaway: 147			
Crawford: 055	Macon: 121	Pettis: 159			
Dade: 057	Mercer: 129	Phelps: 161			
Dallas: 059	Montgomery: 139	Randolph: 175			
Daviess: 061	Pike: 163	St.Francois: 187			
DeKalb: 063	Ralls: 173	Saline: 195			
Dent: 065	Shelby: 205	Scott: 201			
Douglas: 067	Sullivan: 211	Stoddard: 207			
Gentry: 075	Warren: 219				
Harrison: 081	Worth: 227				
Henry: 083					
Hickory: 085					
Howard: 089					
Howell: 091					
Iron: 093					
Knox: 103					
Laclede: 105					
Lawrence: 109					
Lincoln: 113					
McDonald: 119					
Madison: 123					
Maries: 125					
Miller: 131					
Mississippi: 133					
Moniteau: 135					
Monroe: 137					
Morgan: 141					
New Madrid: 143					
Oregon: 149					
Osage: 151					
Ozark: 153					
Pemiscot: 155					
Perry: 157					
Polk: 167					
Putnam: 171					
Ray: 177					
Reynolds: 179					
Ripley: 181					
St. Clair: 185					
Ste. Genevieve: 193					
Schuyler: 197					
Scotland: 199					
Shannon: 203					
Stone: 209					
Taney: 213					
Texas: 215					
Vernon: 217					
Washington: 221					
Wayne: 223					
Webster: 225					
Wright: 229					

Note: FIPS codes are five-digit numbers that identify every county in every state in the country. The first two digits identify the state; the last three digits identify counties in that state. Since the only counties of interest are all in Missouri, the last three digits of this code are all that are needed to identify them.

The variable used in designating rural areas is defined in terms of the three types of rural areas. The variable used in designating urban areas is defined in terms of the two types of urban areas together with suburban areas.

MAP 4.1

MISSOURI
DIVISION OF FAMILY SERVICES
ADMINISTRATIVE DISTRICTS

(7-74)

Large Urban

This group contains two counties, St. Louis and Jackson, both characterized by population greater than 600,000 and per capita income about $4,000, with high urban density. Included in this category is St. Louis city.

The two metropolitan centers of St. Louis County and Jackson County contain 34 percent of Missouri's population and are four to six times larger than the next largest county. However, there are substantial differences between these two counties. St. Louis County has the highest per capita income in the state at $4,750, while Jackson County has a per capita income of $4,052. The population of St. Louis is 50 percent larger than Jackson. In any demonstration design, the individual offices in St. Louis would have to be examined for matched pairs rather than matching St. Louis and Jackson counties. The organizational structure of Family Services in St. Louis City is unique to the remainder of the state.

Suburban

There are seven counties in this group which is characterized by a relatively large population level and per capita income and a geographical location adjacent to the urban center of St. Louis and Kansas City. The populations of the counties range from 132,000 to 37,000 and per capita income from $4,400 to $3,100. Of these, Platte is the most affluent with per capita income greater than $4,000.

Small Urban

Six counties are classified as small urban counties. They are characterized by populations between 40,000 and 170,000 and per capita income between $3,000 and $3,710. They contain the smaller urban centers of Springfield, Columbia, Joplin, and Jefferson City. Each county has a major population concentration. Three counties in the group deserve special mention. Pulaski County contains Ft. Leonard Wood which may make it somewhat uncharacteristic from other counties in demand for social service. Cole County, because of the state offices, has the highest per capita income of the group and may also make it somewhat uncharacteristic. Boone County contains the University of Missouri which may also make the social service demand different from the other counties in this group.

Large Rural

Eighteen counties are classified as large rural counties. These counties have populations between 40,000 and 15,000 and are characterized by two population concentrations within the county which comprise at least 50 percent of the county population. This set of counties is distinguished from the remaining two rural county sites by having a relatively large population center compared to the size of the county.

More Affluent Rural

Twenty counties are classified as more affluent rural. These counties are characterized by a population density criteria such that the sum of the two largest population concentrations is no greater than 50 percent of the county population. The populations of the counties range between 19,000 and 3,000. They also have relatively high rural per capita income levels, ranging from $2,900 and $3,500. These counties are mainly located in the northern and central part of the state.

Less Affluent Rural

There are 61 counties in this grouping. These counties are characterized by population between 28,000 and 4,000 and per capita income less than $2,900. The population density criteria of having the sum of the two largest towns less than 50 percent of the population separates these counties from the large rural counties. These counties lie mainly in the southern part of the state.

COMPARISON OF WORK-RELATED PERCEPTIONS IN URBAN/SUBURBAN AND RURAL LOCATIONS: SUPERVISORS

Table 4.18 contains the means and standard deviations of the first 11 dimension scores for DFS supervisors in various types of urban/suburban and rural settings. Variations in this data should give some insights into the effects that location and supervisor type have on work-related perceptions. In reading the table, one should note that standard deviations appear in parentheses.

As was noted with regard to Table 4.2, dimension scores are intended to reflect a supervisor's attitudes, perceptions and evaluations toward his/her work. For brevity's sake, all three will be referred to by "perceptions" alone.

In order to study the influence that location has work-related perceptions, locations within supervisor types were ranked. Scores with the most favorable impact on perceptions were ranked one; scores with the most adverse impact were ranked five and six (i.e., the second lowest and lowest ranks). In 7 of the 11 dimensions, there is a direct relationship between a dimension's magnitude and its favorable impact on perceptions; in the remaining four, this relationship is inverted. The four inverse dimensions are:

- DIM04: Job Pressure;
- DIM05: Role Overload;
- DIM06: Stability of Work Environment;
- DIM07: Alienation.

The next three sections discuss the impact that various types of rural and urban/suburban settings have on a supervisor's work-related perceptions.

Income Maintenance and Social Services III,V Plus "Other" Supervisors: S350

An examination of ranked dimension scores reveals that S350 supervisors who live in small urban areas appear to have the most favorable work-related perceptions. Such areas are ranked first on the following dimensions: (1) DIM01 (2) DIM02 (3) DIM07 (4) DIM08 (5) DIM09 (6) DIM10 (7) DIM11. On only two dimensions, DIM04 and DIM05, does this type of area rank fifth or sixth.

Supervisors who live in large rural areas or small, affluent ones appear to have the least favorable work-related perceptions. Such areas

Table 4.18

DIMENSION SCORES BY SUPERVISOR CATEGORY AND LOCATION:
RURAL VS URBAN/SUBURBAN

	Supervisors III,V Others (S350)	IMS I,II (IMS12)	SSS I,II (SSS12)
	DIM01: Job Satisfaction		
Small, less affluent rural	3.50(0.46)	3.19(0.52)	3.30(0.43)
Small, more affluent rural	3.25(0.33)	2.91(0.69)	4.00(0.0)
Large rural	3.40(0.51)	3.33(0.60)	3.16(0.52)
Small urban	3.80(0.52)	3.20(0.47)	3.31(0.62)
Suburban	3.25(0.40)	3.26(0.65)	3.31(0.36)
Large urban	3.37(0.53)	2.66(0.51)	2.84(0.48)
	DIM02: Job Motivation		
Small, less affluent rural	3.78(0.50)	3.70(0.44)	3.69(0.41)
Small, more affluent rural	3.63(0.43)	3.17(1.04)	4.25(0.0)
Large rural	3.80(0.51)	4.00(0.59)	3.86(0.48)
Small urban	4.19(0.66)	3.77(0.58)	4.03(0.36)
Suburban	3.45(0.33)	3.57(0.69)	3.72(0.55)
Large urban	3.92(0.60)	3.11(0.63)	3.48(0.53)
	DIM03: Work Organization		
Small, less affluent rural	3.27(0.44)	3.12(0.42)	3.24(0.65)
Small, more affluent rural	3.22(0.49)	2.75(0.25)	3.75(0.0)
Large rural	3.13(0.57)	3.19(0.70)	2.93(0.51)
Small urban	3.06(0.85)	3.21(0.53)	2.92(0.49)
Suburban	3.85(0.68)	3.14(0.69)	2.97(0.28)
Large urban	3.13(0.42)	2.93(0.68)	3.15(0.55)
	DIM04: Job Pressure		
Small, less affluent rural	3.45(0.75)	3.07(0.63)	3.18(0.73)
Small, more affluent rural	3.47(0.51)	2.67(0.38)	2.25(0.0)
Large rural	3.02(0.72)	3.03(0.98)	3.39(0.43)
Small urban	3.50(0.35)	3.70(0.60)	3.40(0.82)
Suburban	2.75(0.43)	3.25(0.80)	3.00(0.67)
Large urban	3.22(0.84)	3.02(0.81)	3.14(0.68)

Table 4.18 (continued)

	Supervisors III,V Others (S350)	IMS I,II (IMS12)	SSS I,II (SSS12)
	DIM05: Role Overload		
Small, less affluent rural	2.29(0.57)	2.57(0.98)	2.13(0.53)
Small, more affluent rural	2.40(0.52)	2.33(0.29)	1.50(0.0)
Large rural	2.72(0.26)	2.03(0.62)	2.79(0.39)
Small urban	2.75(0.65)	2.32(0.40)	2.22(0.51)
Suburban	1.70(0.76)	2.57(0.61)	2.40(0.70)
Large urban	2.25(0.75)	2.60(0.70)	2.36(0.79)
	DIM06: Stability of Work Environment		
Small, less affluent rural	2.56(0.52)	2.62(0.83)	2.82(0.60)
Small, more affluent rural	2.57(0.52)	2.44(0.19)	2.00(0.0)
Large rural	2.67(0.44)	2.71(0.54)	2.67(0.47)
Small urban	2.58(0.32)	3.06(0.58)	3.00(0.70)
Suburban	2.60(0.49)	2.81(0.69)	2.83(0.74)
Large urban	3.02(0.83)	3.18(0.77)	3.42(0.65)
	DIM07: Alienation		
Small, less affluent rural	2.39(0.53)	2.67(1.02)	2.74(0.69)
Small, more affluent rural	2.57(0.50)	2.92(0.52)	1.50(0.0)
Large rural	2.70(0.86)	2.39(0.77)	2.71(0.42)
Small urban	2.00(0.84)	2.69(0.47)	2.80(0.86)
Suburban	2.35(0.49)	3.11(1.58)	2.80(0.52)
Large urban	2.45(0.76)	3.21(0.74)	3.30(0.70)
	DIM08: Group Relations		
Small, less affluent rural	4.26(0.54)	4.00(0.63)	4.09(0.64)
Small, more affluent rural	4.15(0.53)	3.33(0.76)	4.50(0.0)
Large rural	4.30(0.42)	4.31(0.68)	3.93(0.53)
Small urban	4.50(0.41)	4.04(0.50)	4.17(0.35)
Suburban	4.50(0.35)	4.00(0.41)	4.25(0.42)
Large urban	4.16(0.47)	3.49(0.88)	3.75(0.76)
	DIM09: Power and Autonomy		
Small, less affluent rural	3.41(0.46)	3.00(0.49)	3.27(0.53)
Small, more affluent rural	3.48(0.55)	3.53(0.12)	4.40(0.0)
Large rural	3.30(0.33)	3.34(0.89)	3.11(0.45)
Small urban	3.65(0.38)	3.00(0.60)	3.34(0.89)
Suburban	3.56(0.33)	2.63(0.51)	3.46(0.43)
Large urban	3.51(0.67)	2.88(0.62)	2.93(0.54)

Table 4.18 (continued)

	Supervisors III,V Others (S350)	IMS I,II (IMS12)	SSS I,II (SSS12)
	DIM10: Communications		
Small, less affluent rural	3.95(0.34)	3.53(0.45)	3.87(0.42)
Small, more affluent rural	3.82(0.31)	3.58(0.14)	3.25(0.0)
Large rural	3.75(0.39)	3.73(0.38)	3.25(0.35)
Small urban	4.31(1.14)	3.40(0.67)	3.60(0.47)
Suburban	3.90(0.45)	3.46(0.34)	3.55(0.70)
Large urban	3.86(0.55)	3.25(0.47)	3.38(0.42)
	DIM11: Organizational Goal Clarity/Realism		
Small, less affluent rural	3.91(0.42)	3.87(0.59)	3.63(0.42)
Small, more affluent rural	3.63(0.69)	3.78(1.07)	3.00(0.0)
Large rural	3.73(0.56)	3.94(0.86)	3.10(0.90)
Small urban	4.56(0.51)	3.64(0.54)	3.60(0.86)
Suburban	4.47(0.56)	3.67(0.88)	3.37(1.02)
Large urban	4.10(0.70)	3.25(0.96)	3.03(0.89)

are ranked either fifth or sixth on the following dimensions: (1) DIM01 (2) DIM02 (3) DIM04 (4) DIM05 (5) DIM06 (6) DIM07 (7) DIM08 (8) DIM09 (9) DIM10 (10) DIM11. On no dimensions are these areas ranked first.

In a physical sense, suburban areas lie between their urban and rural counterparts. This state of being "in the middle" apparently carries over into their dimension scores. Suburbs rank first on dimension DIM03, DIM04 and DIM05; they rank fifth or sixth on DIM01 and DIM02.

Small urban and suburban areas provide many of the conveniences of urban living but not the congestion and turbulence of large metropolitan areas. The more placid life style, convenience and greater professional autonomy (such areas rank first in worker perceived power and autonomy) of this type of area appears to appeal to S350 supervisors. This finding is consistent with prior studies which suggest that job satisfaction is positively related to job autonomy.[1/]

Income Maintenance I, II—Supervisors: IMS12

An examination of ranked dimension scores for IMS12 supervisors reveals that those who live in large rural areas, or small affluent ones, appear to have the most favorable work-related perceptions. This finding contrasts sharply with that of their S350 counterparts. Large rural areas rank first on dimensions DIM01, DIM02, DIM05, DIM07, DIM08, DIM10 and DIM11; their small affluent counterparts ranking first on DIM04, DIM06 and DIM09. It should also be noted that small affluent rural areas rank fifth or sixth on DIM01, DIM02, DIM03 and DIM08; large rural areas rank fifth or sixth on none of the eleven dimensions. Of these two types of rural areas, one may conclude that supervisors who live in large rural areas also have the most favorable work-related perceptions.

Supervisors who live in urban areas, especially large ones, appear to have the least favorable sort of work-related perceptions. Large urban areas rank fifth or sixth on dimensions DIM01, DIM02, DIM05, DIM06, DIM07, DIM10 and DIM11; small urban areas rank fifth or sixth on DIM04, DIM06, DIM10 and DIM11.

[1/] See Srivasta, et al. Job Satisfaction and Productivity, Case Western Reserve University, Cleveland, Ohio, 1975. Chap. 2.

Social Services I, II—Supervisors: SSS12

SSS12 supervisors who live in small rural areas appear to have the most favorable work-related perceptions. Small affluent areas rank first on DIM01 through DIM09 (inclusive); small, less affluent, areas rank first on DIM10 and DIM11. Small more affluent areas rank fifth or sixth on DIM10 and DIM11; small less affluent areas rank fifth or sixth only on DIM02.

Supervisors who live in large areas, both urban and rural, appear to experience the least favorable work-related perceptions. Large urban areas rank fifth or sixth on DIM01, DIM02, DIM06, DIM07, DIM08, and DIM09; large rural areas rank fifth or sixth on DIM01, DIM03, DIM04, DIM05, DIM08, DIM09 and DIM10.

Area size appears to be inversely related to the degree to which SSS12 supervisors experience positive perceptions. The need of social services personnel to establish and maintain personal contact with clients may make areas with lighter population densities easier to work in. If this is true, smaller areas would tend to improve work-related perceptions.

Rankings Among Supervisor Types

In order to rank supervisors by type, grand means (i.e. the means of sets of means) across all locations and for each supervisor category were calculated. These were then ranked by the same sort of criteria as were used in ranking locations. This ranking procedure was carried out across the supervisor categories, within each dimension. The average rank within each category was then obtained (i.e., sum all eleven ranks and divide by eleven).

On the basis of this procedure, S350 supervisors appear to have the most favorable job and work-related perceptions; SSS12 supervisors experience the next most favorable overall perceptions; IMS12 supervisors have the least favorable perceptions. These findings are summarized in Table 4.19.

It is again worth noting that a supervisor category's rank with respect to DIM01 (i.e., Job Satisfaction) corresponds to its rank when all dimensions are considered. Since this finding has generally applied to both types of location classification, average responses on DIM01 seem good indicators of overall work-related perceptions. The existence of consistent relationships between other dimensions and job satisfaction appears to be supported by these empirical findings.

Table 4.19

RANKING OF SUPERVISOR CATEGORIES

(1 = highest rank; 3 = lowest rank)

	Supervisors III,V Others (S350)	IMS I,II (IMS12)	SSS I,II (SSS12)
DIM01	1	3	2
DIM02	2	3	1
DIM03	1	3	2
DIM04	3	2	1
DIM05	2	3	1
DIM06	1	2	2
DIM07	1	3	2
DIM08	1	3	2
DIM09	1	3	2
DIM10	1	2	2
DIM11	1	2	3

At least one previous survey of studies into job satisfaction[2/] suggests that autonomy is positively related to satisfaction. The results found in Tables 4.5, 4.6 and 4.19 support this finding. In all cases, the ranking of supervisor categories on DIM09 (power and autonomy) matches the ranking on DIM01 (job satisfaction). The same survey suggests that weaker evidence exists supporting a positive relationship between satisfaction and interpersonal relations. The empirical findings of Table 4.19 supports this theory (rankings on DIM01 correspond to rankings on DIM08 (group relations)).

CONCLUSIONS

The following conclusions apply to all types of areas in Missouri.

- S350 supervisors appear to have the most favorable overall work-related perceptions among the three supervisor categories. Within this category, supervisors who live in small urban areas have the most favorable

[2/] Srivasta, et al. op. cit.

perceptions; those who live in large rural and small affluent rural areas have the least favorable perceptions.

- SSS12 supervisors appear to have the next most favorable overall work-related perceptions. Within this category, supervisors who live in small rural areas appear to have the most favorable perceptions; those living in large rural and urban areas have the least favorable perceptions.
- IMS12 supervisors have the least favorable work-related perceptions. Within this category, supervisors who live in large rural or small affluent rural areas appear to have the most positive perceptions; those living in urban areas, especially large ones, have the least favorable perceptions.
- The ranking of a supervisor category with respect to DIM01 (Job Satisfaction) corresponds to its overall ranking with respect to all dimensions. This finding holds over all types of location classifications.
- The rankings of a supervisor category with respect to DIM08 (Group Relations) and DIM09 (Power and Autonomy) correspond to its ranking with respect to DIM01. This finding holds over all types of location classifications.
- While the findings associated with Tables 4.2 and 4.18 imply relationships, these are not necessarily causal.

COMPARISON OF WORK-RELATED PERCEPTIONS IN URBAN/SUBURBAN WITH RURAL LOCATIONS: CASEWORKERS

As has already been noted on several occasions, the dimensions scores derived from questions on the Missouri (1976) survey provide a concise summary of that survey's results. Dimension scores are therefore utilized in Table 4.20. Contents of this table include:

1. The average dimension score (arithmetic mean) for each location and caseworker type;

2. The standard deviation which is associated with each average (contained in parentheses).

Data on standard deviations are provided for the benefit of interested readers; time limitations precluded their consideration in the discussion which follows.

Dimension scores reflect the attitudes, perceptions and evaluations which caseworkers have toward their work. For the sake of brevity, these characteristics will subsequently be referred to as "perceptions."

Most dimensions have been scored so that there is a direct relationship between a dimension's score and the degree to which that characteristic engenders favorable work-related perceptions. For four dimensions this relationship is inverted. These dimensions are:

1. DIM04: Job pressure
2. DIM05: Role overload
3. DIM06: Stability, work environment
4. DIM07: Alienation

Definition and Description of the Various Urban/Suburban and Rural Locations

A detailed discussion of the various urban/suburban and rural locations that appear in Table 4.20 is provided on pp 4-29 through 4-33 of this chapter. As the need arises, readers are referred back to this material. Table 4.20 appears on the next page.

Table 4.20

DIMENSION SCORES BY CASEWORKER CATEGORY AND LOCATION: RURAL VS URBAN/SUBURBAN

Dimension description, location type	Income maintenance caseworkers	Social service workers	Social service caseworkers	Social service workers and caseworkers	"OTHR" caseworkers
DIM01: Job satisfaction					
Small less affluent rural	3.30(0.54)	3.19(0.58)	3.37(0.63)	3.28(0.61)	3.58(0.54)
Small more affluent rural	3.19(0.55)	3.31(0.59)	2.77(0.56)	3.07(0.62)	2.79(0.29)
Large rural	3.26(0.55)	3.20(0.50)	3.22(0.43)	3.21(0.46)	3.10(0.47)
Small urban	2.93(0.56)	3.01(0.46)	3.09(0.59)	3.05(0.52)	3.46(0.64)
Suburban	2.93(0.55)	2.99(0.47)	2.92(0.31)	2.95(0.40)	2.91(0.64)
Large urban	2.56(0.62)	2.90(0.66)	2.67(0.52)	2.77(0.60)	2.96(0.68)
DIM02: Job motivation					
Small less affluent rural	3.85(0.50)	3.86(0.63)	3.77(0.56)	3.82(0.59)	3.97(0.60)
Small more affluent rural	3.81(0.60)	3.83(0.54)	3.64(0.24)	3.75(0.44)	3.17(0.14)
Large rural	3.75(0.68)	3.84(0.51)	3.75(0.60)	3.79(0.56)	3.77(0.53)
Small urban	3.53(0.58)	3.95(0.59)	3.88(0.71)	3.91(0.64)	4.19(0.63)
Suburban	3.43(0.55)	3.63(0.58)	3.41(0.51)	3.52(0.55)	3.50(0.0)
Large urban	3.04(0.72)	3.66(0.64)	3.44(0.68)	3.53(0.67)	3.61(0.80)
DIM03: Work organization					
Small less affluent rural	3.27(0.57)	2.80(0.69)	3.16(0.76)	2.98(0.74)	3.72(0.57)
Small more affluent rural	3.07(0.72)	3.17(0.63)	2.82(0.75)	3.02(0.68)	3.75(0.90)
Large rural	3.21(0.79)	2.85(0.49)	3.07(0.73)	2.97(0.64)	3.38(0.69)
Small urban	3.11(0.74)	2.98(0.58)	3.40(0.52)	3.19(0.58)	3.69(0.82)
Suburban	3.27(0.72)	2.91(0.82)	3.46(0.51)	3.17(0.74)	4.25(0.35)
Large urban	3.09(0.75)	3.17(0.61)	3.15(0.67)	3.16(0.64)	3.70(0.77)
DIM04: Job pressure					
Small less affluent rural	3.13(0.68)	3.41(0.51)	2.79(0.56)	3.10(0.61)	2.63(0.67)
Small more affluent rural	3.09(0.65)	3.44(0.58)	3.04(0.99)	3.27(0.79)	2.33(0.38)
Large rural	3.01(0.70)	3.27(0.70)	2.84(0.64)	3.03(0.69)	2.87(0.49)
Small urban	3.35(0.70)	3.45(0.73)	2.83(0.70)	3.15(0.77)	3.00(0.99)
Suburban	3.18(0.66)	3.47(0.58)	3.11(0.69)	3.30(0.65)	2.25(0.35)
Large urban	3.10(0.76)	3.14(0.68)	3.02(0.67)	3.07(0.67)	2.95(1.07)
DIM05: Role overload					
Small less affluent rural	2.06(0.54)	2.26(0.60)	2.06(0.70)	2.16(0.66)	2.23(0.80)
Small more affluent rural	2.03(0.56)	2.44(0.53)	2.00(0.65)	2.25(0.61)	2.33(0.58)
Large rural	2.22(0.58)	2.38(0.48)	2.19(0.55)	2.27(0.52)	2.08(0.56)
Small urban	2.29(0.65)	1.82(0.54)	1.77(0.53)	1.80(0.52)	2.36(0.78)
Suburban	2.25(0.60)	2.16(0.60)	2.18(0.64)	2.17(0.61)	2.75(0.35)
Large urban	2.53(0.61)	2.51(0.72)	2.16(0.74)	2.31(0.75)	2.49(0.86)
DIM06: Stability, work environment					
Small less affluent rural	2.54(0.54)	2.75(0.61)	2.39(0.70)	2.57(0.67)	2.27(0.58)
Small more affluent rural	2.44(0.66)	2.59(0.55)	2.67(0.43)	2.62(0.48)	2.67(0.58)
Large rural	2.73(0.72)	2.73(0.65)	2.85(0.73)	2.80(0.69)	2.85(0.72)
Small urban	3.01(0.66)	2.88(0.76)	2.93(0.69)	2.90(0.71)	3.09(1.16)
Suburban	2.73(0.73)	2.73(0.74)	2.81(0.69)	2.77(0.71)	2.83(0.71)
Large urban	3.19(0.75)	3.29(0.87)	3.41(0.76)	3.36(0.81)	2.83(0.78)

Table 4.20 (continued)

Dimension description, location type	Income maintenance caseworkers	Social service workers	Social service caseworkers	Social service workers and caseworkers	"OTHR" caseworkers
DIM07: Alienation					
Small less affluent rural	2.67(0.59)	2.98(0.83)	2.50(0.90)	2.75(0.90)	2.50(0.52)
Small more affluent rural	2.50(0.51)	2.78(0.46)	2.82(0.86)	2.80(0.64)	3.17(0.38)
Large rural	2.78(0.76)	2.90(0.85)	2.82(0.68)	2.85(0.75)	2.75(0.44)
Small urban	3.04(0.83)	2.89(0.62)	3.05(0.83)	2.97(0.72)	3.21(1.07)
Suburban	3.20(0.81)	2.97(0.71)	3.11(0.59)	3.03(0.65)	2.50(1.06)
Large urban	3.53(0.69)	3.43(0.71)	3.47(9.70)	3.45(0.70)	3.01(0.77)
DIM08: Group relations					
Small less affluent rural	3.72(0.78)	3.56(0.77)	3.59(1.00)	3.58(0.88)	3.82(0.85)
Small more affluent rural	3.64(0.90)	3.61(1.14)	3.07(1.17)	3.38(1.15)	2.33(0.58)
Large rural	3.64(0.78)	3.77(0.64)	3.62(0.91)	3.68(0.80)	3.35(0.85)
Small urban	3.58(0.80)	3.54(0.80)	3.46(0.75)	3.50(0.76)	3.32(1.23)
Suburban	3.32(1.00)	3.28(0.75)	3.00(0.96)	3.15(0.85)	2.50(2.12)
Large urban	2.97(0.90)	3.18(0.90)	3.03(0.85)	3.10(0.87)	3.40(0.92)
DIM09: Power and autonomy					
Small less affluent rural	2.75(0.51)	2.85(0.57)	2.93(0.58)	2.89(0.57)	2.79(0.80)
Small more affluent rural	2.84(0.51)	2.67(0.41)	2.83(0.74)	2.74(0.56)	2.80(0.20)
Large rural	2.62(0.61)	3.13(0.58)	2.80(0.45)	2.94(0.53)	2.88(0.54)
Small urban	2.48(0.55)	2.99(0.50)	3.04(0.45)	3.01(0.47)	2.82(0.57)
Suburban	2.68(0.62)	2.76(0.62)	2.54(0.47)	2.66(0.56)	2.30(0.71)
large urban	2.58(0.59)	2.82(0.59)	2.68(0.56)	2.74(0.58)	2.87(0.70)
DIM10: Communications					
Small less affluent rural	3.31(0.63)	3.46(0.72)	3.37(0.74)	3.42(0.72)	3.33(0.74)
Small more affluent rural	3.01(0.94)	3.31(0.66)	2.64(0.99)	3.02(0.86)	2.92(0.38)
Large rural	3.20(0.62)	3.37(0.66)	3.17(0.68)	3.26(0.67)	3.02(0.40)
Small urban	2.98(0.66)	3.16(0.59)	2.91(0.54)	3.04(0.57)	3.07(0.83)
Suburban	2.99(0.71)	2.89(0.59)	2.46(0.75)	2.69(0.69)	2.50(0.71)
Large urban	2.69(0.69)	2.80(0.66)	2.80(0.59)	2.80(0.62)	3.09(0.95)
DIM11: Organizational goal clarity/realism					
Small less affluent rural	3.55(0.69)	3.32(0.95)	3.64(0.92)	3.48(0.94)	3.65(0.97)
Small more affluent rural	3.48(0.67)	3.44(0.41)	3.19(1.32)	3.33(0.89)	2.78(0.19)
Large rural	3.48(0.69)	3.23(0.90)	3.17(0.89)	3.20(0.88)	3.18(0.63)
Small urban	3.27(0.82)	3.50(0.75)	2.90(0.89)	3.20(0.86)	3.58(1.02)
Suburban	3.15(0.83)	3.10(0.73)	2.98(0.92)	3.04(0.81)	2.50(1.65)
Large urban	2.79(0.82)	2.84(0.89)	2.62(0.92)	2.72(0.91)	3.37(0.99)

Joint Consideration of Caseworker Category and Location Type

For each dimension and caseworker category, the various types of locations are ranked. A rank of "1" is associated with dimension scores having the most favorable implications for work-related perceptions; a rank of "6" (or "5" in the event of tied rankings) denotes scores with the least favorable implications for these perceptions. The assumed relationships between dimension scores and perceptions, mentioned above, provide the basis for this ranking.

The resulting location rankings appear on the next page in Table 4.21. The average rank of a location on a given dimension, regardless of caseworker type, is given in the last column of the table. This ranking is accomplished by taking the averages of the corresponding caseworker ranks and ranking the results (lowest average, most favorable; highest average, least favorable).

Income Maintenance Caseworkers

An examination of Table 4.21 for income maintenance caseworkers reveals that, with the exception of DIM03 (work organization), the average dimension ranks with the most favorable implications for work-related perceptions appear in rural areas. In the case of DIM03, the average rural rank closely approximates its urban/suburban counterpart; in terms of DIM03, urban/suburban and rural areas are about the same. Up to this point, urban/suburban and rural areas have been considered as two general classes.

If one considers individual location types, the most favorable ranks on all dimensions occur in a rural area. With only one exception, DIM04 (job pressure), the most favorable rankings are associated with small rural areas; in the case of DIM04, the most favorable ranking is found with large rural areas.

By implication, urban/suburban areas in general have the least favorable dimension rankings. Individual urban/suburban locations which have the worst ranks are associated with all dimensions except for DIM03 (work organization). Of these locations, large urban areas appear the least favorably in terms of income maintenance caseworker perceptions.

Table 4.21

RANKING OF LOCATIONS BY DIMENSION AND CASEWORKER CATEGORY

Dimension location type	Income maintenance caseworkers	Social service workers	Social service caseworkers	"OTHR" caseworkers	Average location rank
DIM01					
Small less affluent rural	1	3	1	1	1
Small more affluent rural	3	1	5	6	4
Large rural	2	2	2	3	2
Small urban	4	4	3	2	3
Suburban	4	5	4	5	5
Large urban	5	6	6	4	6
DIM02					
Small less affluent rural	1	2	2	2	1
Small more affluent rural	2	4	4	6	3
Large rural	3	3	3	3	2
Small urban	4	1	1	1	1
Suburban	5	6	6	5	5
Large urban	6	5	5	4	4
DIM03					
Small less affluent rural	1	5	3	3	2
Small more affluent rural	5	1	6	2	4
Large rural	2	4	5	6	5
Small urban	3	2	2	5	2
Suburban	1	3	1	1	1
Large urban	4	1	4	4	3
DIM04					
Small less affluent rural	4	3	1	3	2
Small more affluent rural	2	4	5	2	3
Large rural	1	2	3	4	1
Small urban	6	5	2	6	5
Suburban	5	6	6	1	4
Large urban	3	1	4	5	3
DIM05					
Small less affluent rural	2	3	3	2	1
Small more affluent rural	1	5	2	3	2
Large rural	3	4	6	1	3
Small urban	5	1	1	4	2
Suburban	4	2	5	6	4
Large urban	6	6	4	5	5
DIM06					
Small less affluent rural	2	3	1	1	2
Small more affluent rural	1	1	2	2	1
Large rural	3	2	4	4	4
Small urban	4	4	5	5	5
Suburban	3	2	3	3	3
Large urban	5	5	6	3	6

Table 4.21 (continued)

Dimension location type	Income maintenance caseworkers	Social service workers	Social service caseworkers	"OTHR" caseworkers	Average location rank
DIM07					
Small less affluent rural	2	5	1	1	2
Small more affluent rural	1	1	2	4	1
Large rural	3	3	2	2	3
Small urban	4	2	3	5	4
Suburban	5	4	4	1	4
Large urban	6	6	5	3	5
DIM08					
Small less affluent rural	1	3	2	1	1
Small more affluent rural	2	2	4	6	2
Large rural	2	1	1	3	1
Small urban	3	4	3	4	2
Suburban	4	5	6	5	4
Large urban	5	6	5	2	3
DIM09					
Small less affluent rural	2	3	2	5	2
Small more affluent rural	1	6	3	4	3
Large rural	4	1	4	1	1
Small urban	6	2	1	3	2
Suburban	3	5	6	6	5
Large urban	5	4	5	2	4
DIM10					
Small less affluent rural	1	1	1	1	1
Small more affluent rural	3	3	5	5	4
Large rural	2	2	2	4	2
Small urban	5	4	3	3	3
Suburban	4	5	6	6	6
Large urban	6	6	4	2	5
DIM11					
Small less affluent rural	1	3	1	1	1
Small more affluent rural	2	2	2	5	2
Large rural	2	4	3	4	3
Small urban	3	1	5	2	2
Suburban	4	5	4	6	4
Large urban	5	6	6	3	5

Social Service Workers

Except for DIM03 (Work Organization), DIM05 (Role Overload) and DIM09 (Power and Autonomy), rural areas also possess the most favorable generalized location rankings for this type of personnel. Urban/suburban areas rank most favorably on DIM03 and DIM05; the two general types of areas are tied with respect to DIM09.

In terms of individual types of locations, rural areas rank most favorably on DIM01, DIM03, DIM06, DIM07, DIM08, DIM09 and DIM10. Except for DIM08 and DIM09, these most favorable rankings are associated with small rural areas. In terms of favorable rankings, these small rural areas do not appear to have the same dominating position that they have for income maintenance caseworkers.

As noted above, urban/suburban areas rank most favorably on DIM03 and DIM05. In both cases, the individual types of location where the most favorable rank occurs are both urban/suburban. Individual urban/suburban areas also rank most favorably on DIM02 and DIM11. It should be noted that DIM03 is most favorably associated with both urban/suburban and rural areas.

The work-related perceptions of social service workers who live in rural areas appear more favorable than do those of their urban/suburban counterparts. This favorable association between rural locations and favorable perceptions appears not, however, as strong as was the case for income maintenance caseworkers.

Social Service Caseworkers

Except on DIM03 and DIM05, social service caseworkers who live in rural areas have more favorable work-related perceptions than do their urban/suburban counterparts. Urban areas fare most favorably with respect to DIM03; the two general types of areas are virtually tied with respect to DIM05.

The findings for social service caseworkers are basically similar to those for social service workers. They, too, exhibit a positive relationship between rural settings and favorable work-related perceptions. The former type of personnel also appear to do especially well in small rural areas.

In terms of the three caseworker categories considered to date, social service caseworkers appear to lie between income maintenance caseworkers and social service workers. The favorableness of their perceptions is not

as strongly oriented toward rural settings as their former counterparts; it is more strongly oriented in this direction than is the case for their latter counterparts.

Some Interim Implications

Earlier chapters have commented on the positive relationships that often exist between job satisfaction and other work-related perceptions. The preferred rankings that rural locations have with regard job satisfaction (i.e., DIM01) are consistent with this observation. In each caseworker category considered to date (in this section), these rankings forecast the favored positions that rural locations appear to hold when all dimensions are considered.

The intermediate position that social service caseworkers have in relation to social service workers and their income maintenance counterparts is also noteworthy. Like social service workers, caseworkers involved in this area are ultimately concerned with the solution to client problems. Their involvement is more administratively oriented, however, and in this respect they are similar to their income maintenance counterparts. While not strongly committed to administrative duties as this latter group, they lack the freedom of movement enjoyed by social service workers. Their intermediate position with regard rural settings may simply reflect the intermediate nature of their (i.e., social service caseworkers) duties.

"Other" Caseworkers

When discussing these other types of caseworkers, rural areas rank most favorably with respect to DIM04, DIM05, DIM06, DIM07 and DIM08. Urban/suburban and rural areas are quite similar with respect to the theoretically important DIM01 and DIM09 dimensions; they are also similar with regard to DIM02, DIM03, DIM10, and DIM11. It should be noted that urban and rural areas are considered to be similar if the summed ranks of the three rural county types differ from the summed ranks of the urban county types by no more than 1.0. In such cases, a relatively small change in ranking county types could change the overall rural-urban ranking if "tied" outcomes are not permitted.

Based on these findings, the perceptions of caseworkers in this category appear less affected by consideration of location than are the preceding caseworker types. If one disregards tied dimensions, rural areas certainly

rank most favorably with regard to more dimensions. One might therefore conclude that rural locations still hold the favored position with regard to work-related perceptions.

On the other hand, the importance that job satisfaction has for such perceptions has already been noted. Directly associated with job satisfaction are considerations of a person's personal autonomy. Urban/suburban and rural areas are quite similar with respect to both considerations (DIM01 and DIM09, respectively).

After considering both positions, it seems most reasonable to assume that location exerts relatively minor influence on work-related perceptions. What impact it might have would tend to favor rural settings.

Overall Location Effects

On the basis of the preceding material, it seems clear that caseworkers who live in rural areas also possess the most favorable sorts of work-related perceptions. To investigate this hypothesis more closely, Table 4.22 was developed.

Table 4.22

OVERALL RANKINGS OF LOCATION TYPES

Location Type	Rank
Small less affluent rural	1
Small more affluent rural	3
Large rural	2
Small urban	4
Suburban	5
Large urban	6

The ranks contained in this table were generated from data in the last column of Table 4.21. The rankings of each location type were summed over all dimensions and a corresponding average was then obtained; the resulting set of average rankings was then ranked.

The contents of Table 4.22 support the position that rural areas and work perceptions are positively associated. The improved quality of such perceptions as one moves from large urban, to suburban, to small urban seem consistent with this position.

Comparison of Caseworker Categories

The rankings of the various caseworker categories with respect to each dimension is given on the next page in Table 4.23. These rankings are obtained by summing the location scores associated with each dimension and category and obtaining the average of this sum; the resulting averages are then ranked.

When all dimensions are considered, caseworkers are ranked in the following order:

1. "Other" types of caseworkers
2. Social service workers
3. Income maintenance caseworkers
4. Social service caseworkers

The rankings of these categories over all dimensions is again seen to correspond to their rankings with respect to DIM01 (job satisfaction).

Table 4.24 performs the same sort of ranking but for urban/suburban and rural areas considered separately. Since differences occur between the three sets of rankings, consideration of location exerts an effect. Unlike the rankings for urban/suburban areas, those for rural areas do not exhibit the property that rankings with respect to DIM01 correspond to rankings with respect to all dimensions. If, however, social service caseworkers are combined with social service workers and the former's data is ignored, the property is again established.

Applying Likert's Theory of Management Systems to the DFS Survey's Results

The methodology used in assigning management structures to the various types of caseworkers is based on one developed by Likert. This methodology has already been described on pp 4-4 to 4-6 in this chapter. For present purposes, it suffices to again define the organization categories that will be used in this analysis:

1. System 1: highly authoritarian;
2. System 2: moderately authoritarian;
3. System 3: moderately participative;
4. System 4: highly participative.

Table 4.23

RANKING OF CASEWORKER CATEGORIES BY DIMENSION OVER ALL LOCATIONS

Dimension	Income maintenance caseworkers	Social service workers	Social service caseworkers	"OTHR" caseworkers
DIM01	3	2	4	1
DIM02	4	1	3	2
DIM03	3	4	2	1
DIM04	3	4	2	1
DIM05	2	3	1	4
DIM06	2	3	4	1
DIM07	2	4	3	1
DIM08	2	1	3	4
DIM09	4	1	2	3
DIM10	2	1	4	3
DIM11	1	2	4	3

Table 4.24

RANKINGS OF CASEWORKER CATEGORIES BY DIMENSION FOR URBAN/SUBURBAN AND RURAL AREAS

Dimension	Income maintenance caseworkers	Social service workers	Social service caseworkers	"OTHR" caseworkers
RURAL				
DIM01	1	2	4	3
DIM02	2	1	3	4
DIM03	2	4	3	1
DIM04	3	4	2	1
DIM05	2	4	1	3
DIM06	1	4	3	2
DIM07	1	4	2	3
DIM08	1	2	3	4
DIM09	4	1	2	3
DIM10	2	1	4	3
DIM11	1	2	2	3
URBAN/SUBURBAN				
DIM01	4	2	3	1
DIM02	4	2	3	1
DIM03	3	4	2	1
DIM04	3	4	2	1
DIM05	3	2	1	4
DIM06	3	2	4	1
DIM07	4	2	3	1
DIM08	2	1	3	4
DIM09	4	1	2	3
DIM10	2	1	3	2
DIM11	2	1	3	1

Analytical Results

In Tables 4.25, 4.26, 4.27 and 4.28 "R" denotes rural responses and "U," urban/suburban. Table 4.25 reflects the organizational structure that is perceived by income maintenance workers.

Table 4.25

ANALYSIS OF ORGANIZATIONAL STRUCTURE
INCOME MAINTENANCE CASEWORKERS

Dimension	System 1	System 2	System 3	System 4
DIM01		U	R	
DIM02			R,U	
DIM04		R,U		
DIM06			R,U	
DIM07		U	R	
DIM08			R,U	
DIM09		R,U		
DIM10		U	R	

Both rural and urban/suburban income maintenance caseworkers perceive organizational structures between Systems 2 and 3. Rural caseworkers are, however, closer to System 3 while their urban/suburban counterparts are closer to System 2.

Table 4.26 reflects the organization structure perceived by social service workers.

Table 4.26

ANALYSIS OF ORGANIZATIONAL STRUCTURE
SOCIAL SERVICE WORKERS

Dimension	System 1	System 2	System 3	System 4
DIM01			R,U	
DIM02			R,U	
DIM04		R,U		
DIM06			R,U	
DIM07		U	R	
DIM08			R,U	
DIM09		R,U		
DIM10			R,U	

Both rural and urban/suburban social service workers lie between Systems 2 and 3. While both appear closer to System 3, rural workers are closest to System 3.

Table 4.27 reflects the organizational structure perceived by social service caseworkers.

Table 4.27

ANALYSIS OF ORGANIZATIONAL STRUCTURE
SOCIAL SERVICE CASEWORKERS

Dimension	System 1	System 2	System 3	System 4
DIM01		U	R	
DIM02			R,U	
DIM04			R,U	
DIM06		U	R	
DIM07		U	R	
DIM08			R,U	
DIM09		R,U		
DIM10		U	R	

Rural caseworkers perceive their organizational structure as being very close to System 3. Urban/suburban caseworkers perceive an organizational structure between Systems 2 and 3 but closer to System 2.

Tables 4.25 to 4.27 suggest that as a caseworker's administrative duties increase, location exerts some influence on organizational perceptions. For both income maintenance and social service caseworkers, rural locations are more associated with System 3; urban/suburban locations are associated with System 2. Social service workers, on the other hand, have relatively few administrative (i.e., office-oriented) tasks to perform. Their organizational perceptions are fairly similar in both urban/suburban and rural settings.

Table 4.28 reflects the organizational structure perceived by "other" types of caseworkers.

Table 4.28

ANALYSIS OF ORGANIZATIONAL STRUCTURE
"OTHER" CASEWORKERS

Dimension	System 1	System 2	System 3	System 4
DIM01			R,U	
DIM02			R,U	
DIM04			R,U	
DIM06			R,U	
DIM07			R,U	
DIM08			R,U	
DIM09		R,U		
DIM10		U	R	

"Other" types of caseworkers, whether they be rural or urban/suburban, perceive their organizational structure as being very close to System 3.

CONCLUSIONS

The following conclusions are based on data for both urban and rural locations. Of the two sets of conclusions relating to DFS caseworkers, these have the widest applicability.

- Income maintenance caseworkers who live in rural areas, especially small ones, appear to have the most favorable overall work-related perceptions.
- Social service workers who live in rural areas appear to have more favorable work-related perceptions than their urban/suburban counterparts. The advantage that rural areas seem to have in this respect is not as great as it is for income maintenance workers.
- Social service caseworkers who live in rural areas also appear to have more favorable work-related perceptions than their urban/suburban counterparts. The relative strength of this advantage appears to lie between that of income maintenance caseworkers and social service workers, a situation which may result from the similarities that exist between their duties and those of the other two groups.
- "Other" types of caseworkers who live in rural areas may have slightly more favorable work-related perceptions than do their urban/suburban counterparts. The advantage is probably minimal; urban and rural areas are more probably similar in this respect.

• If the various location types are ranked over all dimensions and caseworker categories, the following order results:

1. Small less affluent rural areas
2. Large rural areas
3. Small more affluent rural areas
4. Small urban areas
5. Suburban areas
6. Large urban areas

(Note: 1 denotes most favorable ranking; 6 denotes the least favorable ranking.)

• Table 4.29 reflects the rankings of caseworker categories for urban and rural areas.

Table 4.29

RANKING OF CASEWORKER CATEGORIES

Rank: Urban/Suburban and Rural	Rank: Rural	Rank: Urban/Suburban
1. "Other" caseworkers	1. Income maintenance	1. "Other" caseworkers
2. Social service workers	2. Social service workers	2. Social service workers
3. Income maintenance caseworkers	2. Social service caseworkers	3. Social service caseworkers
4. Social service caseworkers	3. "Other" caseworkers	4. Income maintenance caseworkers

Note: 1 = most favorable; 4 (or 3) = least favorable.

• In rural county types, and when rural, urban and suburban areas are combined, a category's ranking with respect to job satisfaction corresponds to its ranking with respect to all dimensions. When social service caseworkers are grouped with social service workers, this property applies also to urban/suburban areas (see Tables 4.23 and 4.24).

• Table 4.30 summarizes the organizational structures perceived by different types of caseworkers. As used below, System 1 refers to a highly authoritarian management structure; System 4 to a highly participative management structure. Systems 2 and 3 would be evenly distributed between these extremes.

Table 4.30

ORGANIZATIONAL STRUCTURES PERCEIVED BY CASEWORKERS

Caseworker category	Management system
Income maintenance (rural)	Between Systems 2 and 3 but closer to System 3
Income maintenance (urban/suburban)	Between Systems 2 and 3 but closer to System 2
Social service worker (rural)	Fairly close to System 3
Social service worker (urban/suburban)	Between Systems 2 and 3 but closer to System 3
Social service caseworkers (rural)	Very close to System 3
Social service caseworkers (urban/suburban)	Between Systems 2 and 3 but closer to System 2
"Other" caseworkers (rural)	Very close to System 3
"Other" caseworkers (urban/suburban)	Very close to System 3

• Based on the pattern of responses that appears to emerge, income maintenance and social service caseworkers seem to differ from social service workers in their work-related perceptions. While not verifiable at this time, it would appear that the nature of these groups' activities account for some of these differences (see the "urban/suburban" and "rural" columns of Table 4.29 for an example of such differences).

Caution

While these conclusions may appear to imply the existence of relationships, they do not not necessarily imply that such relationships are causal in nature.

Chapter 5

MULTIVARIATE ANALYSIS OF DFS CASEWORKERS' QUESTIONNAIRE RESULTS

BACKGROUND

Chapter 5 is presented in five sections, of which this is the first. This section is devoted to a brief summary of the remainder of the chapter.

The second section discusses the role played by the comparisons made in Chapter 4 and identifies the need for further analysis.

The third section identifies the regression relationships to be studied, and discusses the uses to which the results of this analysis are to be put.

The fourth section discusses a number of technical matters that relate to regression analysis itself, and to the interpretation and evaluation of its results.

The fifth section is divided into seven subsections. Each subsection discusses specific aspects of the regression results.

RATIONALE FOR EXTENDED ANALYSIS OF THE SURVEY

The dimension scores of Chapter 4 are statistics that describe various aspects of caseworkers (and supervisors) broken down by various geographic areas. Inspection of the absolute values of these descriptive statistics and comparisons across caseworker types and geographic areas can provide further insight into potential problem areas that may require additional research. As patterns begin to emerge from these comparisons, it is tempting to posit at a causal relationship between two or more variables. If the project staff wishes to identify factors that might be used to affect organizational climate, it is important to understand how these factors interact. This interaction cannot be investigated without more sophisticated analytical tools. While a univariate analysis in the preceding chapter offers some insight into relationships that may exist among the variables studied, it cannot specify relative strength or statistical significance of these potential relationships. A number of techniques could conceivably be used for this purpose, but the multivariate stepwise regression technique was selected. A large and very valuable data base has been assembled through this survey but, as is often the case in research projects, resources would not permit an extended analysis that would capitalize on the full potential of the data collected. Given that constraint, the next section identifies those criterion values that were researched using the multivariate technique.

IDENTIFICATION OF THE REGRESSION RELATIONSHIPS TO BE STUDIED AND THE USES TO WHICH THE SUBSEQUENT OUTPUT CAN BE PUT

In order to more rigorously identify factors which potentially affect work-related perceptions, a multivariate stepwise regression was employed. The variables for this analysis consist of questions contained in the case-worker survey. Dependent variables were selected on the basis of their assumed impact on job satisfaction. These variables are:

- Survey question 2.2 : Satisfaction with work
- Survey question 2.4 : Satisfaction with pay
- Survey question 2.11 : Satisfaction with supervisors
- Survey question 2.19 : Job challenge
- Survey question 2.60 : Likely to leave agency
- Survey question 2.100 : Emotional involvement

The independent variables for each of these dependent variables were initially selected by inspecting the questions appearing on the survey. The final selection of such variables was accomplished by the regression analysis itself. Lists of independent variables used appear in Appendix F.

The results of this analysis serve two functions:

1. They identify factors, i.e., independent variables, which are statistically significant in accounting for the behavior of their respective dependent variables.

2. They indicate whether each significant independent variable has a direct or inverse impact on its dependent variable.

While the numerical output of this type of analysis is often the basis for making estimations and/or projections, such is not the case here. For reasons to be discussed shortly, such results have, unfortunately, dubious value. This limitation on the interpretation and utilization of output is not without precedent; at least one other published study has used a similar approach.*

To summarize, regression results provide two kinds of information that are useful to administrators. They first identify factors which are likely to influence the work perceptions of agency personnel, and then indicate whether each factor has a beneficial or detrimental impact on such perceptions.

*Churchill, et al., loc. cit.

SUMMARY OF TECHNICAL MATTERS TO BE CONSIDERED IN THE INTERPRETATION OF REGRESSION RESULTS

Definitions of Frequently Used Technical Terms

This section defines four terms that are frequently employed when discussing regression analyses that may not be familiar to the non-technical reader. Readers who wish additional information on regression techniques are referred to two excellent texts:

1. Wonnacott, R.J. and Wonnacott, T.H., Econometrics. New York: John Wiley and Sons, 1970.

2. Johnston, J. Econometric Methods. New York: McGraw-Hill, 1963.

A regression analysis seeks to estimate the relationship that may exist among a set of variables. The definitions to be considered relate to this relationship. Consider the following example:

(1) $$Y = b + m_1 X_1 + m_2 X_2.$$

Definition 1: The variable whose value is being estimated by the relationship, in this case Y, is referred to as the "regressand."

Definition 2: The variables whose values determine the regressand's value, in this case X_1 and X_2, are referred to as "regressors."

Definition 3: The relationship between Y and X_1 (alternately, X_2) is said to be positive (or direct), if increases in Y are associated with increases in X_1. This relationship is said to be negative (or inverse) if increases in Y are associated with decreases in X_1.

Regression analyses estimate relationships like (1) by estimating their coefficients (in this case b, m_1 and m_2). Unless this estimation is perfect (virtually speaking, an impossible occurrence), there will be a definite discrepancy between actual and estimated values of Y. The smaller this discrepancy, the better will be the estimation. A measure of how effective the estimated relationship is in reducing these discrepancies is given by the so-called coefficient of multiple correlation, sometimes also referred to as the coefficient of determination.

Definition 4: The coefficient of multiple correlation (or determination) is defined as the ratio of:

$$\frac{\text{Variation in Y accounted for by the estimated relationship.}}{\text{Total variation that occurs in Y}}$$

The value of this ratio clearly varies between zero (no detectable relationship between the variables) and one (a perfectly estimated relationship). This coefficient is often denoted by R^2.

Restrictions on the Interpretation of Output

Variables which are normally employed in regression studies are usually cardinal in nature. The values of such variables are either integer (e.g., 1, 2, -3) or decimal fractions (e.g., 10.333, 1.2, - .009); the latter are said to be real numbers. Variables which denote membership in a particular category can also appear; examples of such variables are seasonal variables (i.e., summer, fall, winter and spring) and locational variables (e.g., St. Louis, Chicago, New York). Categorical entities of this sort are represented by sets of "dummy" variables (i.e., variables assuming values of zero or one).

Responses to the Organizational Diagnostic Survey can be interpreted as the values of a set of variables. Each variable is associated with one and only one survey question; values for these variables are integers whose values range between 1 and 5. The set of such variables is neither cardinal or categorical, but rather is ordinal (i.e. variable values reveal a ranking of respondent perceptions).

The conventional treatment of ordinal variables would consist of representing their values by sets of dummy variables. Since they can be regarded as a special case of categorical variables, this procedure would yield conventionally interpretable results.

In order to adequately represent all the variables which appear in this analysis, a very large number of dummy variables would have to be employed. The modelling in such an effort would be quite involved and the processing of the resulting models would be very expensive. For these reasons, this approach was not used.

Responses to the various survey questions are based on implicit sets of behavioral functions. Efforts have been made to estimate such functions; the von Neumann-Morgenstern subjective utility equations provide a well

known example. While establishing that functions of this sort are expressable in terms of continuous real variables (i.e., variables whose values are real numbers), these efforts have failed to generate results which have generalized applicability.

It may, however, be argued that the observed survey responses are proxies for actual points on "hidden" behavioral relationships. Since these points consist of ordinary cardinal numbers, one can treat their proxies as if they had identical properties. Survey questions could then enter a regression analysis on the assumption that they too were ordinary real variables. It is this approach that is used in the current analysis.

The resulting output will serve the desired goals of the current study. Factors, i.e., independent variables, which have a significant impact on their dependent variables can be identified; their impact can be classified as positive or negative. These interpretations are made possible by the undeniable relationships that exist between changes in survey responses and movements along their related behavioral equations. Regression analysis can detect significant relationships between these equations; it can therefore serve a similar function when operating on their proxies.

The numerical results of a regression analysis depend, for their validity, on the quality of data which is employed. Since the responses to survey questions are not really values of ordinary quantitative variables, the corresponding numerical results lack unambiguous interpretation. It is for this reason that they have negligible application.

Issues of Autocorrelation and Multicollinearity (Optional Reading)

The SPSS multivariate stepwise regression software package was used in the computer segment of this study. Included in this package is a means for monitoring the level of correlation that exists between a potential regressor and regressors already selected as being statistically significant. If this correlation exceeds a certain value, the potential regressor will be excluded from further consideration. This feature was employed in order to minimize the likelihood of significant problems with multicollinearity among the regressors.

To check for the presence of autocorrelation in the regressions' residuals, Durban-Watson test statistics were generated. Except for the "other" category of caseworkers, standard Durban-Watson tables fail to cover the regressions which are associated with other caseworker categories. Plots of the regressions' residuals were obtained and several of these were subjected to nonparametric tests for randomness. While a certain amount of autocorrelation may be present in some of the regressions, it probably isn't too great.

In ordinary regression analysis where use is made of estimated regressor coefficients, the existence of either multicollinearity or autocorrelation creates potential difficulties. Since numerical results (these are, of course, the regression coefficients) are not used in the current analysis, neither condition (at its experienced levels) is expected to create difficulty.

PRESENTATION OF REGRESSION STUDY'S RESULTS

Analytical Results: An Overview

The overall ability of this study's 21 regression relationships to account for the variation in the selected 6 response items are summarized in Table 5.1 and Figure 5.1. The selected measure of each relationship's effectiveness in achieving this goal is given by R^2, the coefficient of determination. Since increasing the number of variables in a regression can reduce its effectiveness, R^2 has been adjusted to take this factor into consideration. These results appear on the next two pages.

In multivariate studies involving survey questions, values of R^2 of 0.3 or higher are considered fairly good. Only the results associated with survey question 2.100 (emotional involvement) are significantly low. Results for four other regressions are, on the other hand, considered quite good. These latter regressions are:

1. Survey question 2.2, "other" caseworkers ($\bar{R}^2 = .70$)
2. Survey question 2.2, all types caseworkers ($\bar{R}^2 = .60$)
3. Survey question 2.19, all types caseworkers ($\bar{R}^2 = .56$)
4. Survey question 2.60, "other" caseworkers ($\bar{R}^2 = .52$)

The effectiveness of the remaining regressions, while not as notable, are still quite acceptable.

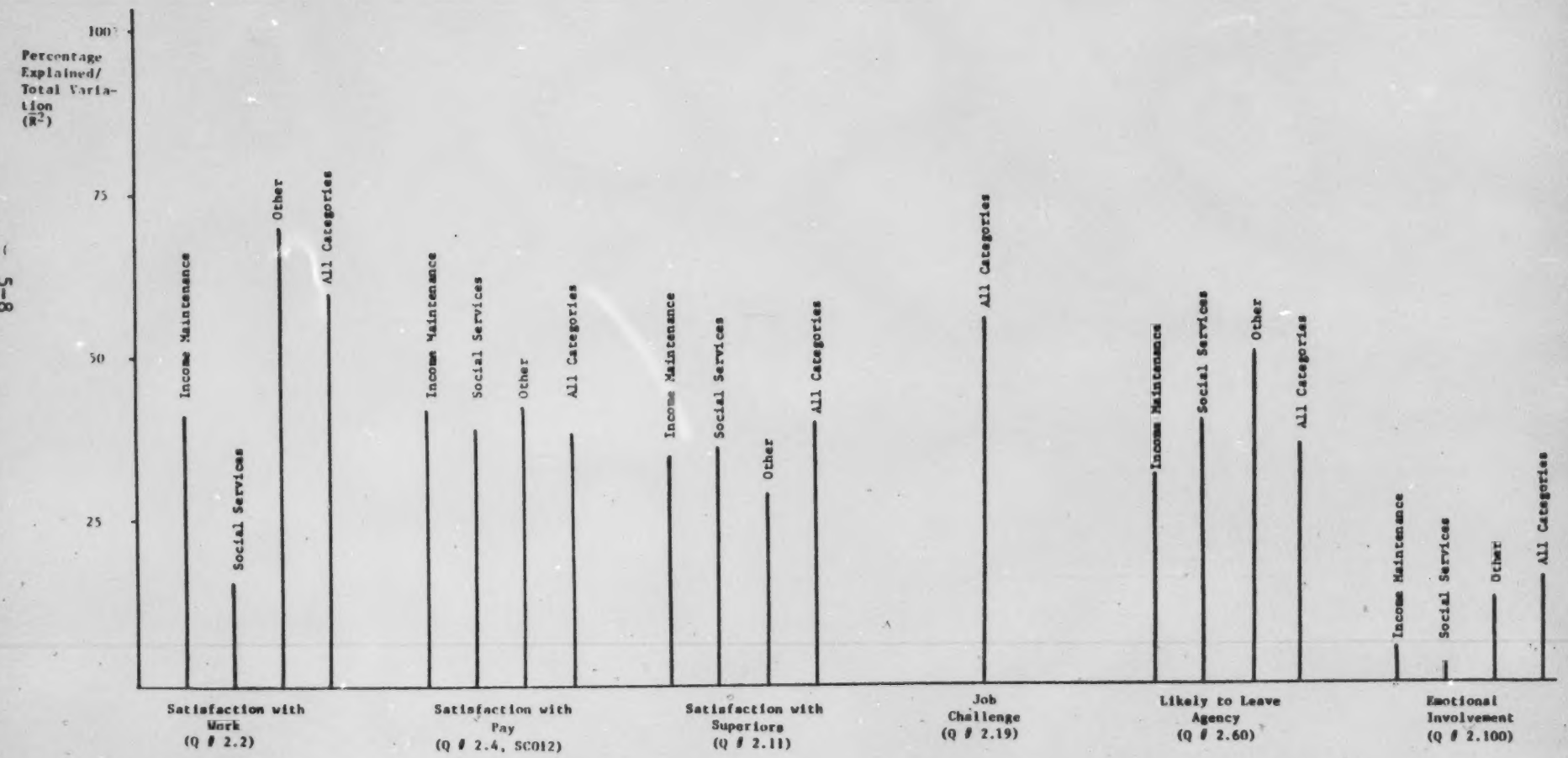
Table 5.1

COMPARISON OF EXPLAINED REGRESSION VARIANCE

Regressand	Caseworker Category: Income maintenance	Social service	"Other"	All categories
Q2.2: Satisfaction with Work	0.415	0.164	0.704	0.604
Q2.4/SC012: Pay Satisfaction	0.424	0.395	0.426	0.387
Q2.11: Satisfaction w/ Superiors	0.351	0.365	0.299	0.404
Q2.19: Job Challenge	N.A.	N.A.	N.A.	0.559
Q2.60: Likely to Leave Agency	0.322	0.406	0.522	0.364
Q2.100: Emotional Involvement	0.053	0.026	0.130	0.160

N.A.: Not Available

Fig. 5.1—Ability of the Organizational Diagnostic Survey to Explain Variation in Six Selected Response Items by Type of Worker



Results for Individual Response Items, an Introduction

A major goal of the study is to identify explanatory variables, i.e., survey questions, that have significant explanatory value for each response item. This is accomplished by determining if an explanatory variable's coefficient in a regression equation is significant. The criteria for inclusion is the 5% level of significance.

Except for survey question 2.19 (job challenge), all other response items possess four regression relationships. There is, in other words, a separate relationship for Income Maintenance, Social Services and "other" caseworkers/workers, as well as one for all caseworkers aggregated into a single group. Results of these regressions are found in Tables 5.2 to 5.7 and are visually summarized in Figures 5.2 to 5.7.

The coefficients identified in Tables 5.2 to 5.7 apply to "standardized" variables, not variables in their natural form. For this reason, no intercept term is given. The coefficients of determination which are provided are adjusted, as are the R^2s of Table 5.1. In determining the number of parameters that a regression must estimate, the intercept term was included. This was done to accommodate the intercept which is, in fact, generated by the SPSS package (SPSS provides two sets of regression coefficients, one for standardized variables and one for their nonstandardized counterparts).

In order to gain some insight into the effect that each included explanatory variable (i.e., regressor) has, the change in R^2 which accompanied it's inclusion was noted. This change was then divided by the finalized relationship's R^2 to give a measure of that variable's contribution to total explained variation of the corresponding response item. The results of this analysis appear in Figures 5.2 to 5.7. Because of the form that the SPSS's regression output takes, this analysis was conducted with R^2s which are not adjusted for numbers of estimated parameters.

Not all of the explanatory variables which appear in Tables 5.2 to 5.7 appear again in Figures 5.2 to 5.7. The excluded variables are those whose contributions (to total explained variance) are so small that their graphic presentation would have been virtually impossible. Only variables whose contributions were less than 1% were excluded; there were very few such cases.

Each included variable is identified by it's survey question number. Variables whose contributions to explained variance exceed 10% were also assigned descriptive labels. Due to a problem of space, the remaining variables were not so labeled. They can, however, be easily identified by using the survey numbers to look up their corresponding questions; a sample of the caseworker survey appears in Appendix H.

When using these figures, the reader should be careful not to be misled by the heights of the bar charts. While each bar is of the same height, this simply signifies that each represents 100% of a regression relationship's explained variation. It does not imply that the explained variation is equal from one relationship to another; an examination of Figure 5.1 reveals quite the contrary.

Satisfaction with Work

The regression results for this response item (#2.2) are contained in Table 5.2 and Fig. 5.2. One of the most striking results from this analysis is that satisfaction with the type of work for both I.M. and S.S. workers/ caseworkers is strongly and positively related to the extent to which they feel freedom in providing services to their clients. That this variable appears significant may have important policy implications for the Division. We have noted in Chap. 2 the tendency to pursue specialization of tasks as a method for accomplishing the increased workload of the Division. One of the negative aspects of a tendency toward specialization is that it limits the feeling of power an employee may have over activities in his job. The danger would appear to be that as the scope of a caseworker's job becomes more narrowly defined, there is less opportunity to completely satisfy the need of the client through the delivery of a benefit or service.

Where management is primarily concerned with achieving production schedules, is it legitimate to be concerned with job satisfaction? The answer to this is a qualified "Yes" if undesirable levels of personnel turnover and/or absenteeism adversely impact on production. As is discussed later in this chapter, caseworkers who claim an increased likelihood of leaving in the agency rate low in the areas of power and autonomy.

For I.M. caseworkers, satisfaction with pay is positively related to satisfaction with the type of work. While this variable is analyzed separately elsewhere in this chapter, this relationship deserves some additional comment. Demonstration projects that seek to redesign the work will undoubtedly affect the extent of a caseworker's satisfaction with pay. There would appear, then, to be an opportunity to avoid exhorbitant increases in pay by modifying caseworker jobs. Another intriguing facet of this relationship is that I.M. caseworkers may feel they are entitled to more pay, not necessarily because of what they produce,but what they have to put up with on the job. That is, if they find the type of work they are performing disagreeable, they are more likely to request salary increases as compensation for putting up with undesirable work.

Age is the third most significant factor associated with satisfaction with work for I.M. caseworkers. That it is positively related is not unusual,

Table 5.2

REGRESSION RESULTS FOR REGRESSAND Q2.2: SATISFACTION WITH WORK, BY CASEWORKER TYPE

Income Maintenance Caseworkers

Regres: 2.67 Freedom,Prov Serv
Coefficient: 0.23
F Statistic: 17.1

Regres: 2.4 Sat w/Pay
Coefficient: 0.21
F Statistic: 15.7

Regres: 1.1 Age
Coefficient: 0.21
F Statistic: 15.2

Regres: 2.28 Pressure for Qual
Coefficient: 0.19
F Statistic: 12.6

Regres: 2.38 Stress
Coefficient: -0.17
F Statistic: 11.1

Regres: 2.11 Sat w/Superv
Coefficient: 0.13
F Statistic: 5.9

Regres: 2.32 Pressure f/Coworkers
Coefficient: 0.12
F Statistic: 5.6

Adjusted R^2 = 0.415
n = No. of observations = 244
K = No. of parameters = 8

Social Service Workers/Caseworkers

Regres: 2.67 Freedom,Prov Serv
Coefficient: 0.26
F Statistic: 12.2

Regres: 2.29 Pressure,Deadlines
Coefficient: 0.18
F Statistic: 5.9

Regres: 2.52 Personnel Turnover
Coefficient: -0.17
F Statistic: 5.0

Regres: 2.101 Actual Workload
Coefficient: -0.15
F Statistic: 4.4

Regres: D4 Being a S.S. Worker
Coefficient: 0.13
F Statistic: 3.0

Adjusted R^2 = 0.164
n = No. of observations = 163
K = No. of parameters = 6

"Other" Types Caseworkers

Regres: 2.11 Sat w/Superv
Coefficient: 0.76
F Statistic: 52.7

Regres: 1.19 Office Size
Coefficient: 0.57
F Statistic: 29.3

Regres: 2.52 Personnel Turnover
Coefficient: -0.29
F Statistic: 7.6

Regres: 2.4 Sat w/Pay
Coefficient: -0.24
F Statistic: 5.2

Adjusted R^2 = 0.704
n = No. of observations = 30
K = No. of parameters = 5

All Classes Caseworkers

Regres: 2.3 Sat w/Job
Coefficient: 0.62
F Statistic: 529.5

Regres: 2.21 Promote Public Image
Coefficient: 0.11
F Statistic: 14.9

Regres: 2.58 Disillusionment
Coefficient: -0.09
F Statistic: 12.0

Regres: 2.69 Freedom/Choosing Methods
Coefficient: 0.09
F Statistic: 11.1

Regres: 2.52 Personnel Turnover
Coefficient: -0.08
F Statistic: 10.6

Regres: 2.24 Attempt Work Routine
Coefficient: 0.08
F Statistic: 9.0

Regres: 2.84 Exchange of Ideas
Coefficient: -0.06
F Statistic: 6.0

Regres: 2.102 Perceived Level Workload
Coefficient: -0.06
F Statistic: 5.3

Regres: 2.16 Progress,Professional Dev
Coefficient: 0.05
F Statistic: 4.1

Adjusted R^2 = 0.604
n = No. of observations = 678
K = No. of parameters = 10

Note: "Regres" = Regressor. The numbers associated with "Regres," e.g., 2.67, denote the survey questions which are serving as regressors.

5-12

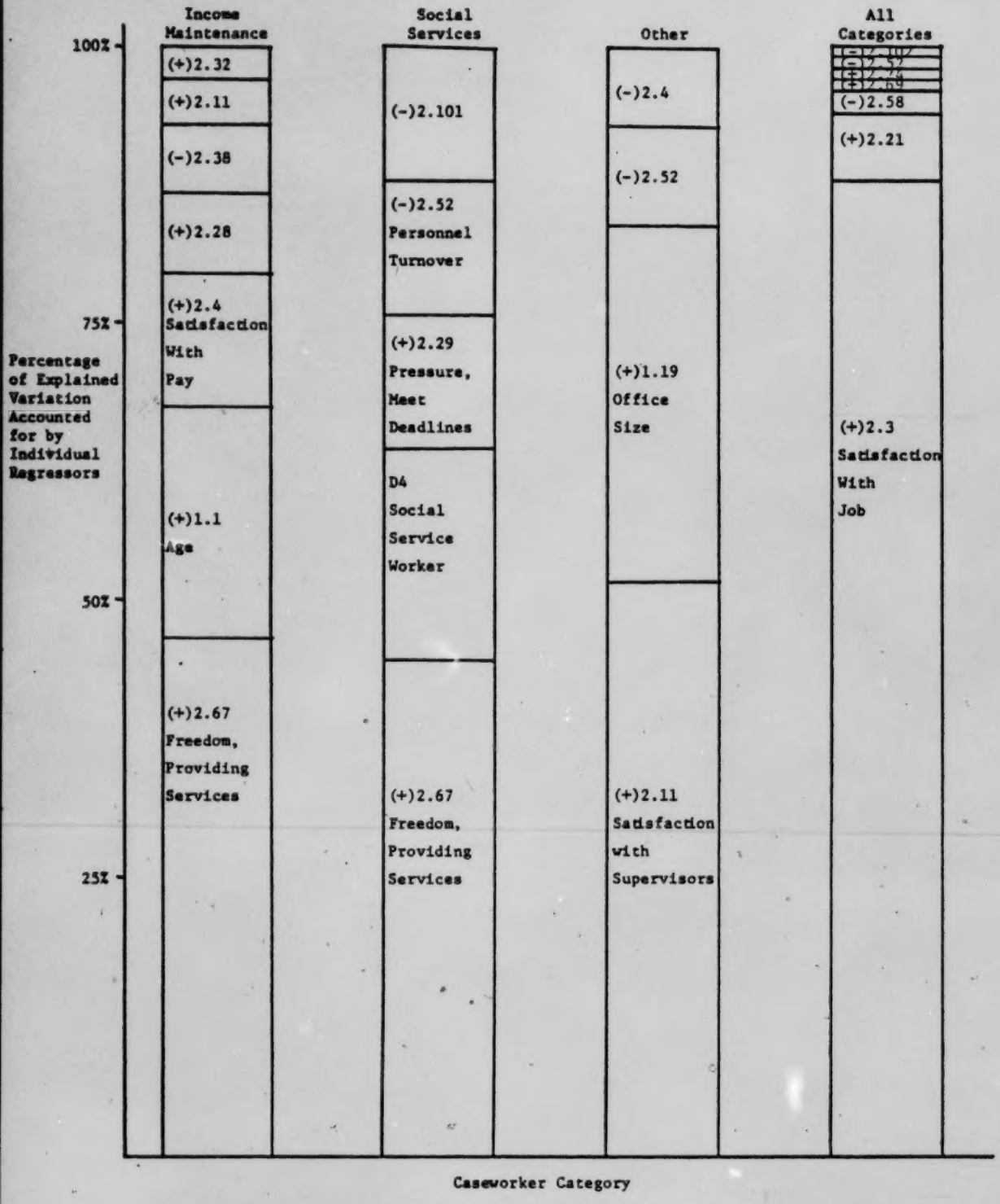


Fig. 5.2 - Relative Importance of Explanatory Variables for Selected Response Items From the Organizational Diagnostic Survey. Dependent Variable: Q # 2.2 (Satisfaction with Work)

NOTE: Numbers appearing in bar charts denote questions in the Organizational Diagnostic Survey: Caseworkers; (-) denotes inverse relationships between variables (i.e., survey questions) and the indicated dependent variable; (+) denotes positive relationships between variables and indicated dependent variable.

for older workers have more experience and have become acclimated to the work situation. Older workers may have more favorable perceptions toward their job, in part because the opportunities for alternative employment may be more limited. Thus, the expression of satisfaction with the type of work should be taken in context with the caseworker's perception of the relative opportunities for alternative employment that provide at least an equivalent degree of satisfaction.

The next two variables for I.M. caseworkers deal with the issue of providing quality service. The first variable shows there is a positive relationship between satisfaction with work and the extent to which the caseworker feels pressure (either externally or internally imposed) to deliver quality service. The next variable, however, points to a role conflict that appears to have been created by the joint pressures to satisfy both quality and quantity objectives. Apparently the greater the extent of conflict between these two objectives the less likely a caseworker is to be satisfied with the type of work he is doing. This also suggests that one of the important objectives of management should be to help caseworkers resolve these sometimes conflicting objectives.

The remaining two variables suggest that interpersonal relations are important determinants of job satisfaction for I.M. caseworkers. The first variable, Satisfaction with Supervisors, is examined more thoroughly in another section of this chapter. The last variable shows that peer group pressure can affect work satisfaction to a positive extent. What the nature of this pressure is, however, is not clear from the questionnaire.

For Social Service personnel, the extent to which the included regressors explain variation in satisfaction with the type of work is rather low. In this analysis, the adjusted R^2 was .16. This suggests that one should look elsewhere for factors associated with job satisfaction in the Social Service field — too much of the variance is unaccounted for by this survey. In spite of the shortcomings of this analysis for Social Services personnel, certain significant relationships did occur. After "Freedom in providing services," the next significant variable was "Pressure to meet deadlines" and was positively related to satisfaction with work. That this relationship appeared significant suggests that pressure in an appropriate form can improve work satisfaction. Note that in the situation

with the I.M. caseworkers, stress as characterized by conflicting objectives adversely impacted on work satisfaction, while pressure to improve output can enhance work satisfaction. Obviously caseworkers draw a definite distinction between production objectives that create stress and those that generate pressure to improve performance.

Personnel turnover was inversely related to satisfaction with work in all job title categories except I.M. caseworkers. One of the original incentives to institute this Manpower Planning Project was to examine the problem of personnel turnover and suggest solutions in the form of demonstration projects. Since 1973, however, a marked decline in personnel turnover has occurred for caseworkers in the Division. The average at that time for caseworkers was approximately 35 percent and is now averaging around 20 percent. The results from this analysis, however, indicate that personnel turnover is still a problem. Caseworkers appear to be dissatisfied with their own work when they perceive personnel turnover to be high. It is probable that caseworkers interpret this variable somewhat differently than the statistic produced by the Division in its quarterly turnover reports. What caseworkers may be reporting on is the extent to which they perceive personnel "turbulence," which encompasses more than just job attrition, and would include such elements as absenteeism, shifts in personnel from one office to another, even promotions that require replacement of an individual.

Actual workload entered as the next most significant variable and is inversely related to satisfaction with work for S.S. personnel. One might hypothesize that the larger their caseload, the less time they are able to spend with any one client and the more dissatisfied they become with their work. The implication from this association is that reducing caseload size would have a favorable impact on work satisfaction for S.S. personnel.

The last variable found significant in the analysis of S.S. personnel was one of a set of dummy variables specifically created to evaluate certain non-numeric characteristics. Six such dummy variables were created so that three demographic characteristics could be evaluated: sex, geographic location (i.e., urban or rural), and job title. In the analysis of work satisfaction for S.S. personnel, being a Social Service worker is positively related to work satisfaction. This suggests that who you are is an important

determinant of the extent to which you are satisfied with the type of work you are doing. It is not possible from this survey, however, to determine whether it is actually the tasks that are performed by the S.S. worker or the status associated with being in that position, or some combination of the two, that accounts for the positive association with work satisfaction.

Of all the regression runs conducted, variation in responses to satisfaction with work for the "Other" caseworker category was best explained by the responses to this survey. The adjusted R^2 in this analysis was .70 which is very high for the analysis of surveys using this technique. A very strong positive relationship was found between satisfaction with work for other caseworkers and the extent to which they are satisfied with their superiors. This is the only job category in which supervision has a strong effect on work satisfaction. The significance of this is not entirely clear, partly because the category "Other" caseworkers is actually a conglomeration of a wide variety of job titles that are more atypical of the Division. One could hypothesize that these caseworkers are more satisfied because they do not feel they are part of the routine elements of the organization. To the extent that they feel they have escaped the system and are supported by their supervisors may account for the high favorable scores on this item and many others in the survey.

One other curious result is that other caseworkers express a greater degree of dissatisfaction with their pay when offering favorable expressions of work satisfaction. This might be expected if other caseworkers perceived their work to be in a specialty area but are receiving pay similar to the non-specialists (i.e., the I.M. and S.S. caseworkers). That this relationship exists may have important policy implications for the future management of the Division. If administrators perceive that the way to improve the Division's effectiveness is through specialization and enhancing the professional image of its personnel, then there is likely to be an even greater dissatisfaction with current pay levels. This could increase personnel turbulence and cause a decline in Division performance, an outcome which is ironically the opposite of what administrators would originally intend.

When all classes of caseworkers are analyzed together, a somewhat different set of significant variables appears. A strong and obvious relationship exists between satisfaction with the type of work being done and

satisfaction with a specific job assignment. What is less clear is why such a relationship did not appear when each job title was analyzed separately. The results may suggest that when caseworkers are segregated by job title, they attach various levels of status to their jobs and find themselves more satisfied with the type of work they are performing if they are more satisfied with who they are in terms of their job title.

Regardless of what their job titles are, freedom and autonomy and perceptions of personnel turbulence are again significantly associated with work satisfaction, as well as expressions of disillusionment with the amount of good that their job is accomplishing.

Satisfaction with Pay

The regression results for pay satisfaction are contained in Table 5.3 and Fig. 5.3. Whether caseworkers were analyzed separately by job title or combined together, the concept of equity appears to be strongly associated with the extent to which personnel are satisfied with their pay; that is, those who feel the system is unfair are least likely to be satisfied with the pay they receive. A number of demographic variables are also associated with pay satisfaction. If one is a male caseworker, he is less likely to be satisfied with pay than his female counterpart. This may be due to the stereotypic roles of males and females in the household. One could hypothesize that the females are more satisfied with their pay because it is used as a supplemental source of income for a family with a male head-of-household. To the extent that males receive equivalent income and feel a greater responsibility for the economic well-being of their families, they should express a greater degree of pay dissatisfaction than their female counterparts.

The geographic region in which caseworkers live is also associated with the extent of their satisfaction with pay. While a simple univariate analysis of pay satisfaction would indicate that rural caseworkers are more satisfied with pay than their urban counterparts, the multivariate analysis indicates that when this variable is analyzed simultaneously with over 100 others, working in a rural location is an important condition of pay satisfaction. This may in part be explained by the extent of alternative employment in rural locations. Thus, rural caseworkers may be more satisfied with their pay if alternative job opportunities of comparable pay are limited. By the same token, caseworkers in urban areas perceive their pay to be less favorable relative to comparable jobs in their immediate area.

Age, a third demographic variable, appears significant only in the Social Services. Possibly older caseworkers are more satisfied with their pay because their incomes are higher, probably because they have been in the agency longer and the primary basis for salary levels is years of service. Another factor that might be considered is that older caseworkers at the higher income levels may perceive alternative employment at the same income level as less likely than their younger counterparts.

Table 5.3

REGRESSION RESULTS FOR REGRESSAND Q2.4/SC012*: SATISFACTION WITH PAY BY CASEWORKER TYPE

Income Maintenance Caseworkers		Social Service Workers/Caseworkers		"Other" Types Caseworkers		All Classes Caseworkers	
Regressor:	2.5 Satisfaction w/ Pay Increase Methods	Regressor:	2.5 Satisfaction w/Pay Increase Methods	Regressor:	2.6 Satisfaction w/ Rating System	Regressor:	2.6 Satisfaction w/Rating System
Coefficient:	0.39	Coefficient:	0.32	Coefficient:	0.45	Coefficient:	0.26
F Statistic:	88.3	F Statistic:	37.4	F Statistic:	17.5	F Statistic:	65.9
Regressor:	2.19 Job Challenge	Regressor:	2.9 Potential for Personal Growth	Regressor:	D6 Rural Location	Regressor:	2.9 Potential for Personal Growth
Coefficient:	0.31	Coefficient:	0.26	Coefficient:	0.31	Coefficient:	0.25
F Statistic:	55.1	F Statistic:	23.8	F Statistic:	9.2	F Statistic:	51.0
Regressor:	2.8 Satisfaction, Physical Facilities	Regressor:	D6 Rural Location	Regressor:	2.19 Job Challenge	Regressor:	D6 Rural Location
Coefficient:	0.10	Coefficient:	0.20	Coefficient:	0.26	Coefficient:	0.23
F Statistic:	6.1	F Statistic:	13.8	F Statistic:	5.6	F Statistic:	46.4
Regressor:	D3 Being A Male	Regressor:	D3 Being A Male			Regressor:	D3 Being A Male
Coefficient:	-0.10	Coefficient:	-0.12			Coefficient:	-0.14
F Statistic:	5.9	F Statistic:	5.6			F Statistic:	19.4
Regressor:	2.103 Perceived Amount of Output	Regressor:	1.1 Age			Regressor:	2.21 Promote Public Image
Coefficient:	0.09	Coefficient:	0.11	Adjusted R^2 = 0.426		Coefficient:	0.12
F Statistic:	5.2	F Statistic:	4.3			F Statistic	11.0
Regressor:	2.50 Fear of Punishment			n = No. of observations = 57		Regressor:	2.47 Diff Sch Clients Normal Hours
Coefficient:	-0.08			k = No. of parameters = 4		Coefficient:	-0.10
F Statistic	3.7					F Statistic	9.3
						Regressor:	2.54 Procedures Changes
Adjusted R^2 = 0.424		Adjusted R^2 = 0.395				Coefficient:	-0.09
n = No. of observations = 386		n = No. of observations = 257				F Statistic:	7.8
k = No. of parameters = 7		k = No. of parameters = 6				Regressor:	2.43 Difficulty, Treatment Plans
						Coefficient:	0.08
						F Statistic:	6.5

5-19

Table 5.3 (continued)

Income Maintenance Caseworkers	Social Service Workers/Caseworkers	"Other" Types Caseworkers	All Classes Caseworkers
			Regressor: D4 Being a Social Service Worker Coefficient: -0.07 F Statistic 5.3
			Regressor: 2.28 Pressure for Quality Coefficient: -0.07 F Statistic: 4.5
			Regressor: 2.16 Progress, Professional Development Coefficient: -0.06 F Statistic 4.1
			Adjusted R^2 = 0.387 n = No. of observations = 678 k = No. of parameters = 12

*SC012 was used with "All Classes Caseworkers" file; V021 was used with all other files.

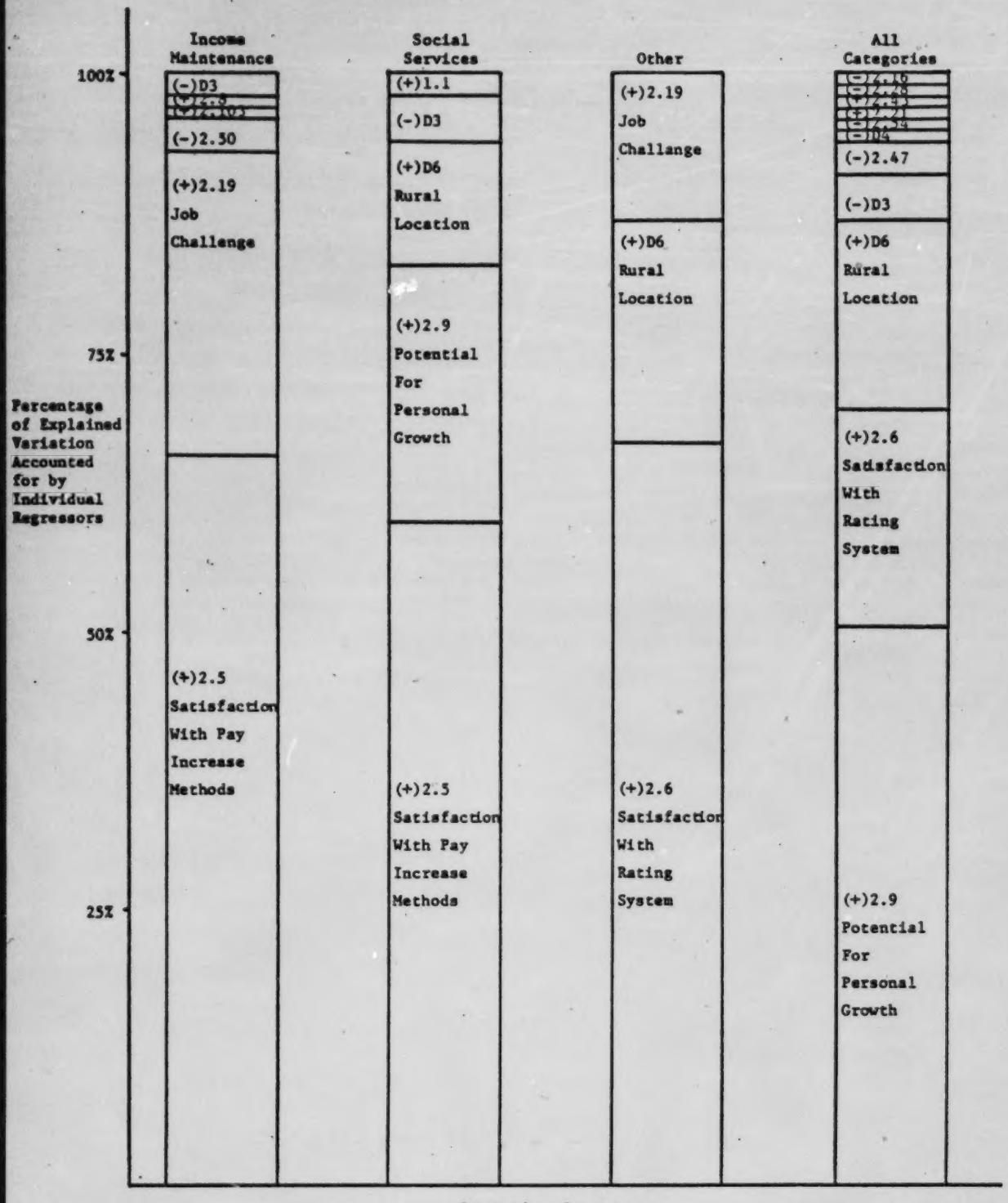


Fig. 5.3 - Relative Importance of Explanatory Variables for Selected Response Items From the Organizational Diagnostic Survey. Dependent Variable: Q # 2.4 (SC012) (Satisfaction with Pay)

NOTE: Numbers appearing in bar charts denote questions in the Organizational Diagnostic Survey: Caseworkers; (-) denotes inverse relationships between variables (i.e., survey questions) and the indicated dependent variable; (+) denotes positive relationships between variables and indicated dependent variable.

When all classes of caseworkers are combined together, another demographic variable appears which is being a Social Service worker. Apparently Social Service workers are the least satisfied with their pay. Again, this is a more important finding in a multivariate analysis as opposed to a univariate analysis. While Social Service workers are on a higher pay scale than I.M. or S.S. caseworkers, the multivariate analysis shows that of the variables analyzed simultaneously, job title is significantly related to pay satisfaction.

In the case of I.M. and "Other" caseworkers, job challenge is positively related to pay satisfaction. Other analyses, conducted but not included in this chapter, have shown that the extent of job challenge is positively related to age and inversely related to education for I.M. workers. One might hypothesize that older, less educated employees find I.M. work more challenging and are also more satisfied with the pay they receive. Thus, some alteration of the job qualifications which does not unduly jeopardize Division performance may tend to raise pay satisfaction and job challenge to the benefit of the Division and the individual employee.

In general it would appear that the best discriminators of pay satisfaction are demographic in nature, such as age, sex, location, and job title. For the most part, these are precisely the characteristics in which government agencies choose not to discriminate on. While this suggests limited opportunity to improve pay satisfaction, the prospects of altering the job itself should be further examined, particularly in the I.M. field where lowering job qualifications would tend to improve indicators of pay satisfaction. Results of interviews summarized in the quarterly turnover reports indicate that financial reasons are the most significant factor stated for those leaving the Division. The analysis provided here suggests that turnover statistics and exit interview survey data should be disaggregated by age, sex, job title, and region to better isolate job turnover problems. We suspect that job turnover is still a problem, but the procedure of aggregating the statistics at the Division level tends to mask turnover problems specific to certain cohorts within the Division.

Satisfaction with Supervisors

Regression results for satisfaction with supervisors are found in Table 5.4 and Fig. 5.4. All regressors are statistically significant at the 5% level.

In three of the four regressions, i.e., those involving the income maintenance, social services and aggregated caseworker categories, the most significant factor influencing satisfaction with supervisors was the perceived quality of supervisory communications. Since the signs of this variable's coefficients are all positive, its impact is direct. The implication of this result is that caseworkers feel most comfortable with supervisors with whom they can communicate, hardly an unexpected conclusion.

The most significant factor in accounting for supervisor satisfaction among "other" caseworkers is the extent to which they are clear about their superiors' expectations of their output. Since this is a function of the adequacy of supervisory communications, results of the four regressions are, on this point, consistent.

Extent of job motivation refers to the importance that caseworkers attach to meeting the goals of their offices. In all four regressions, this factor is significant in determining the levels of perceived supervisor satisfaction. Its impact in each case is direct. The implication of these findings is that satisfaction with supervisors and the importance of goal attainment are directly related; the mechanism of the relationship is, however, unclear. There are two issues which cloud this mechanism:

1. Satisfaction with supervisors is not necessarily related to a subordinate's job motivation. Other factors which could affect the superior-subordinate relationship include interpersonal relations, supervisory style, or demands which supervisors place on subordinates.

2. To argue that high levels of job motivation cause high levels of satisfaction with supervisors is certainly dubious. No matter how important goal attainment may be to a caseworker, it seems decidedly unlikely that he/she will be satisfied with poor or incompetent leadership.

Table 5.4

REGRESSION RESULTS FOR REGRESSAND Q2.11: SATISFACTION WITH SUPERIORS, BY CASEWORKER TYPE

Income Maintenance Caseworkers	Social Service Workers/Caseworkers	"Other" Types Caseworkers	All Classes Caseworkers
Regressor: 2.88 Supervisory Communications	Regressor: 2.88 Supervisory Communications	Regressor: 2.99 Supervisor Expect., Output	Regressor: 2.88 Supervisory Communications
Coefficient: 0.26	Coefficient: 0.44	Coefficient: 0.32	Coefficient: 0.30
F Statistic: 32.7	F Statistic: 71.1	F Statistic: 7.9	F Statistic: 92.7
Regressor: 2.14 Extent of Job Motivation	Regressor: 2.14 Extent of Job Motivation	Regressor: 2.15 Expected High Perform Levels	Regressor: 2.31 Pressure from Supervisor
Coefficient: 0.23	Coefficient: 0.25	Coefficient: 0.30	Coefficient: -0.19
F Statistic: 23.6	F Statistic: 21.5	F Statistic: 5.99	F Statistic 36.4
Regressor: 2.31 Pressure from Supervisor	Regressor: 2.67 Freedom in Providing Services	Regressor: 2.14 Extent of Job Motivation	Regressor: 2.12 Satisfaction with Coworkers
Coefficient: -0.20	Coefficient: 0.13	Coefficient: 0.30	Coefficient: 0.19
F Statistic: 20.9	F Statistic: 5.4	F Statistic: 5.95	F Statistic 35.2
Regressor: 2.15 Expected High Perform Levels			Regressor: 2.14 Extent of Job Motivation
Coefficient: 0.16			Coefficient: 0.19
F Statistic: 12.1			F Statistic: 32.2
Regressor: 2.67 Freedom for Providing Services			Regressor: 2.28 Pressure for Quality
Coefficient: 0.10			Coefficient: 0.16
F Statistic: 4.9			F Statistic 26.0
Regressor: 2.99 Supervisor Expect, Output			Regressor: 2.60 Likely to Leave Agency
Coefficient: 0.09			Coefficient: -0.13
F Statistic: 4.4			F Statistic: 16.2
Adjusted R^2 = 0.351	Adjusted R^2 = 0.365	Adjusted R^2 = 0.299	Adjusted R^2 = 0.404
n = No. of observations = 244	n = No. of observations = 163	n = No. of observations = 30	n = No. of observations = 678
k = No. of parameters = 7	k = No. of parameters = 4	k = No. of parameters = 4	k = No. of parameters = 7

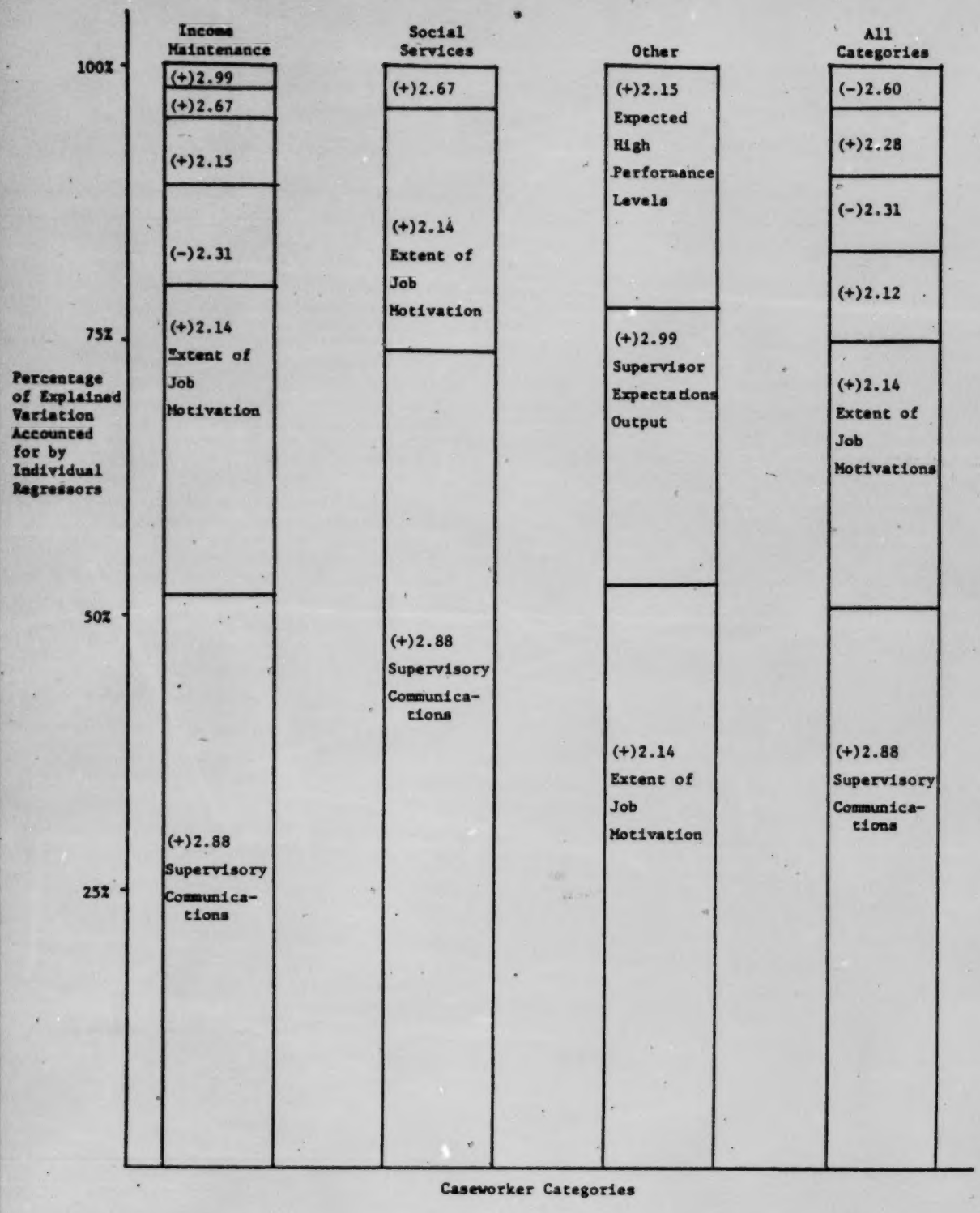


Fig. 5.4 - Relative Importance of Explanatory Variables for Selected Response Items From the Organizational Diagnostic Survey. Dependent Variable: Q # 2.11 (Satisfaction with Supervisors)

NOTE: Numbers appearing in bar charts denote questions in the Organizational Diagnostic Survey: Caseworkers; (-) denotes inverse relationships between variables (i.e., survey questions) and the indicated dependent variable; (+) denotes positive relationships between variables and indicated dependent variable.

At this point there is insufficient information to definitively eliminate this ambiguity.

The impact that supervisory pressure has on a caseworker's perceived satisfaction with supervisors is reflected in the regression results for the income maintenance and aggregated caseworker categories. In both instances, the impact of increased pressure from supervisors is negative. While only applying to two regressions, these results provide credence to the preceding argument that the relationship between satisfaction with supervisors and job motivation is affected by other factors.

Results for income maintenance and "other" caseworkers have potentially important implications when the issue of supervisory pressure is considered. In both cases expected high levels of caseworker performance have a direct relationship with supervisor satisfaction. This finding clearly suggests that high but reasonable performance standards are not necessarily the source of the adverse effects of supervisory pressure that were noted above.

For the most part, the remaining regression results are not unexpected. A seeming exception to this might be the positive impact that pressure for quality has on satisfaction with supervisors; it had, after all, a negative impact on pay satisfaction. There is no necessary conflict in these findings, however. Well motivated personnel can appreciate an emphasis on quality performance by their supervisors; they presumably would share this goal. Granting that this is the case will in no way diminish their dissatisfaction with pay, if they feel they are under-compensated.

In conclusion, the fundamental factor in determining satisfaction with supervisors seems to lie in the adequacy of communications between superiors and subordinates. Job motivation on the part of subordinates also plays a role, but the means by which it does so are currently unclear.

Job Challenge

Regression results pertaining to the job challenge perceived by caseworkers are found in Table 5.5 and Fig. 5.5. All regressors are significant at the 5% level. Only one regression was generated for job challenge, with the various types of caseworkers being represented in this relationship by a set of dummy variables. Since use of these "dummies" allows for the explicit consideration of caseworker type, and since available resources for this analysis were limited, the remaining three regression runs were not made. The caseworker category used in this analysis is the aggregated category.

The most statistically significant factors in accounting for perceived job challenge are the satisfaction caseworkers experience with their work and the potential that they perceive for personal growth; the impact of both factors is direct. Unless a person is satisfied with his/her work, it is unlikely that he/she will perceive their job as interesting, much less challenging. While a necessary ingredient to perceived job challenge, work satisfaction is not, by itself, sufficient. Unless there is the potential for professional growth, a challenging job environment cannot exist. As with work satisfaction, this latter factor is a necessary but not sufficient condition to insure that caseworkers perceive their jobs as challenging.

Another significant factor in accounting for job challenge is the freedom that caseworkers have in choosing their methods of operation; the impact of this factor is direct. That freedom in choosing methods is important is not surprising; a lack of such freedom would imply a diminished potential for discretionary action; reduced opportunities for such action are clearly not conducive to a challenging job situation.

That caseworkers would perceive a need to promote the public image of their agency is interesting. The implication of this finding is that public acceptance and reaction to the agency are important in determining the extent

Table 5.5

REGRESSION RESULTS FOR REGRESSAND Q2.19: JOB CHALLENGE, BY CASEWORKER TYPE

Income Maintenance Caseworkers	Social Service Workers/Caseworkers	"Other" Type Caseworkers	All Classes Caseworkers
No Runs Made	No Runs Made	No Runs Made	Regressor: 2.2 Satisfaction with Work Coefficient: 0.28 F Statistic: 81.4
			Regressor: 2.9 Potential for Personal Growth Coefficient: 0.26 F Statistic: 77.3
			Regressor: 2.21 Promote Public Image Coefficient: 0.19 F Statistic: 39.8
			Regressor: 2.69 Freedom, Choosing Methods Coefficient: 0.14 F Statistic 26.5
			Regressor: D4 Being a Social Service Worker Coefficient: 0.09 F Statistic: 10.6
			Regressor: 2.43 Difficulty, Treatment Plans Coefficient: 0.09 F Statistic 10.4
			Regressor: 2.31 Pressure from Supervisor Coefficient: -0.08 F Statistic: 8.2
			Regressor: 2.28 Pressure for Quality Coefficient: 0.08 F Statistic 8.1
			Regressor: 2.101 Actual Workload Coefficient: -0.08 F Statistic: 7.7
			Regressor: 2.62 Solidarity Coefficient: 0.08 F Statistic: 7.3
			Regressor: 2.55 Importance, Personal Affairs Coefficient: -0.08 F Statistic: 7.3
			Regressor: 2.102 Perceived Level, Workload Coefficient: -0.06 F Statistic 3.9
			Adjusted R^2 = 0.559 n = No. of observations = 678 k = No. of parameters = 13

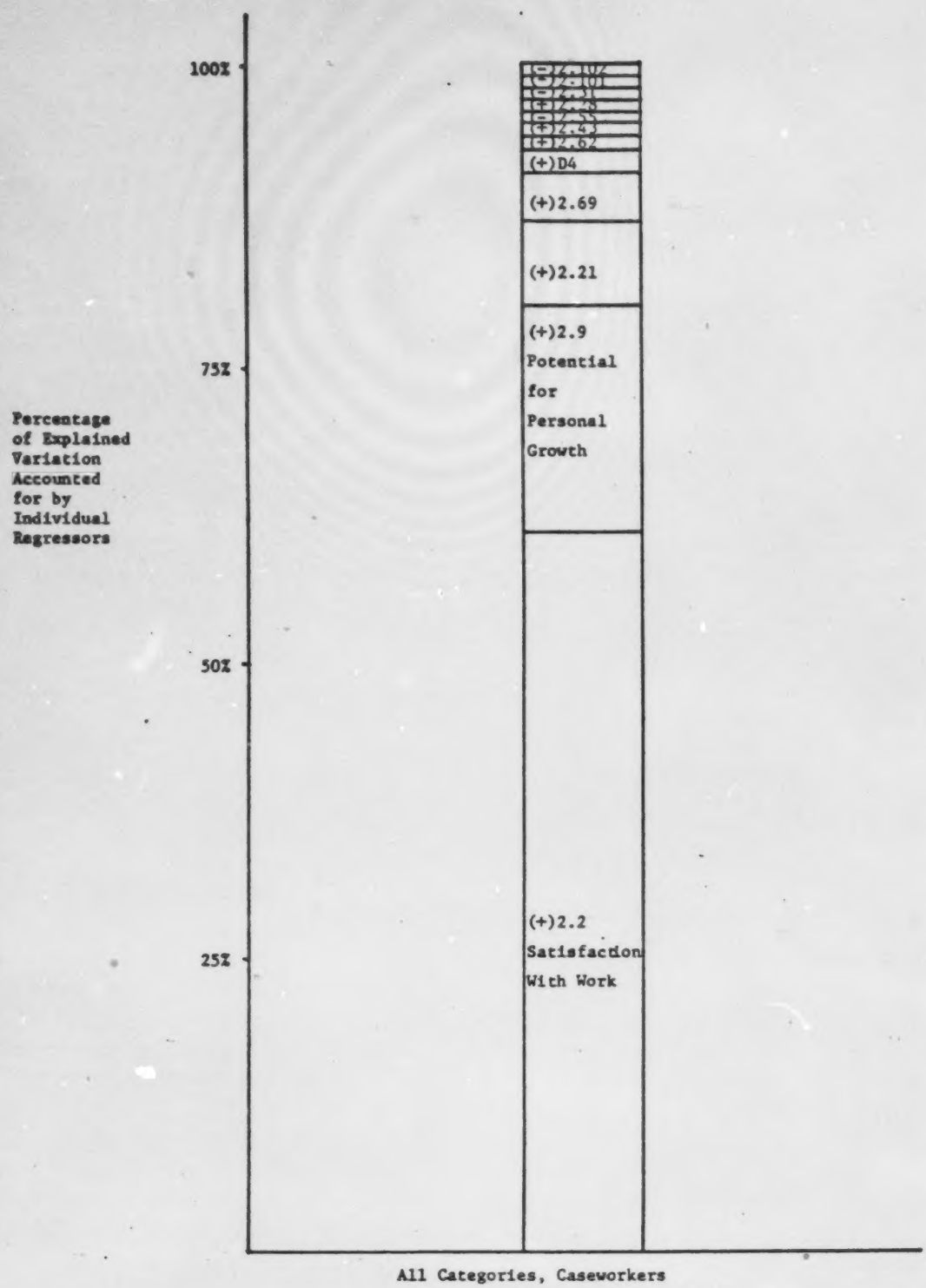


Fig. 5.5 - Relative Importance of Explanatory Variables for Selected Response Items from the Organizational Diagnostic Survey, Dependent Variable: Q # 2.19 (Job Challenge)

NOTE: Numbers appearing in bar charts denote questions in the Organizational Diagnostic Survey: Caseworkers; (-) denotes inverse relationships between variables (i.e., survey questions) and the indicated dependent variable; (+) denotes positive relationships between variables and indicated dependent variable.

to which social services personnel can perform their tasks. Since they express a perceived need to promote their agency, it would seem that its image is, in their eyes, in some way inadequate.

The remaining regression results are generally as expected. Given the nature of a social service worker's activities, it is not surprising that being in this caseworker category should have a positive impact on perceived job challenge. It is not to be assumed, however, that the other factors appearing in this regression apply principally to such personnel. These factors will be potentially applicable to all types of caseworkers; social service workers are simply in an environment that has greater potential for challenging situations.

It is also interesting to note that job challenge and actual workload are inversely related. On the basis of this observation, it might be inferred that increases in a caseworker's workload may necessitate that each case be treated in either an increasingly cursory, or an increasingly routine manner, simply to allow that person to handle all of his/her assigned cases. Under such circumstances, perceived job challenge is likely to drop. Pressure from supervisors could result in similar adaptive behavior by caseworkers; the impact would again be negative, as indeed the results indicate. The adverse effect of pressure from supervisors may also indicate that the guidance provided to caseworkers is somewhat inadequate.

The stimulating effect that pressure for quality can have has already been discussed; while the regressions' dependent variables change, the role played by this factor remains essentially the same. As was also noted above, the negative sign associated with perceived workload levels is due largely to the way this survey question was scored.

Likelihood of Leaving Agency

Regression results which relate to the likelihood that a caseworker will leave the agency appear in Table 5.6 and Fig. 5.6; this material appears on the next two pages. All regressors appearing in the table are significant at the 5% level.

If one looks at the three most statistically significant factors in each regression, one is struck by the diversity of conditions which might cause a caseworker to leave the agency. The four most frequently occurring factors occur with equal frequency. By type of caseworker, these are:

1. Income maintenance: Opportunity for advancement within the agency and the power and autonomy that caseworkers perceive they possess.

2. Social services: Satisfaction with both superiors and general working conditions.

3. "Other:" The power and autonomy perceived by caseworkers and satisfaction with general working conditions.

4. Aggregated category: Opportunities for advancement within the agency and satisfaction with superiors.

Two points can be noted with regard to these factors: (1) as might be expected, all are inversely related with the likelihood of leaving and (2) each group of caseworkers seems to have its own relatively distinctive set of reasons for leaving. When all regressors are considered, one is struck by the number and diversity of factors that are significant for each caseworker group. The list of factors associated with each type of caseworker continues to be relatively distinctive.

Overall, the results for each regression are to be expected. Attention will now be shifted to a consideration of results which are seemingly unexpected. Consider first the perceived workload level (income maintenance category). The sign of this variable suggests an inverse relationship between it and the likelihood of a caseworker leaving the agency. This interpretation cannot be taken at face value because of the method by which perceived workloads were scored. This scoring makes unambiguous interpretation of the variable's sign difficult.

Table 5.6

REGRESSION RESULTS FOR REGRESSAND Q2.60: LIKELIHOOD OF LEAVING AGENCY, BY CASEWORKER TYPE

Income Maintenance Caseworkers		Social Service Workers/Caseworkers		"Other" Type Caseworkers		All Classes Caseworkers	
Regressor:	2.10 Satisfaction w/ Promotion Opp	Regressor:	2.11 Satisfaction w/Supervisors	Regressor:	2.67 Freedom in Providing Services	Regressor:	2.58 Disillusionment
Coefficient:	-0.24	Coefficient:	-0.21	Coefficient:	-0.40	Coefficient:	0.15
F Statistic:	25.6	F Statistic:	15.7	F Statistic:	17.3	F Statistic:	19.4
Regressor:	2.95 Goal Realism	Regressor:	1.1 Age	Regressor:	2.1 Satisfaction, Overall Work Sit.	Regressor:	2.10 Satisfaction w/Promotion Opportunity
Coefficient:	-0.15	Coefficient:	-0.20	Coefficient:	-0.37	Coefficient:	-0.14
F Statistic:	10.8	F Statistic:	14.4	F Statistic:	12.7	F Statistic:	16.4
Regressor:	2.66 Perception of Autonomy/Authority	Regressor:	2.7 Satisfaction w/Working Conditions	Regressor:	2.7 Satisfaction w/ Working Conditions	Regressor:	2.11 Satisfaction w/ Supervisors
Coefficient:	-0.14	Coefficient:	-0.21	Coefficient:	-0.28	Coefficient:	-0.14
F Statistic:	9.5	F Statistic:	13.0	F Statistic:	8.0	F Statistic:	15.7
Regressor:	2.102 Perceived Level, Workload	Regressor:	2.76 Use of Emergency Procedures	Regressor:	D3 Being a Male	Regressor:	2.37 Stress
Coefficient:	-0.13	Coefficient:	0.17	Coefficient:	-0.20	Coefficient:	0.12
F Statistic:	9.5	F Statistic:	10.8	F Statistic:	4.5	F Statistic:	13.1
Regressor:	2.74 Perceived Need Disregard Regs.	Regressor:	2.50 Fear of Punishment			Regressor:	1.1 Age
Coefficient:	0.13	Coefficient:	0.13			Coefficient:	-0.12
F Statistic:	8.3	F Statistic:	6.4			F Statistic:	11.6
Regressor:	2.12 Satisfaction With Coworkers	Regressor:	2.2 Satisfaction With Work			Regressor:	2.1 Satisfaction, Overall Work Situation
Coefficient:	-0.11	Coefficient:	-0.11	Adjusted R^2 = 0.522		Coefficient:	-0.11
F Statistic:	6.4	F Statistic:	4.2			F Statistic:	9.4
Regressor:	2.36 Perceived Role Conflict	Regressor:	2.9 Potential for Personal Growth	n = No. of observations = 56		Regressor:	D1 Income Maintenance Caseworker
Coefficient:	0.11	Coefficient:	-0.11	k = No. of parameters = 5		Coefficient:	-0.09
F Statistic:	6.1	F Statistic:	3.8			F Statistic:	8.8
Regressor:	2.6 Satisfaction w/ Rating System					Regressor:	2.62 Solidarity Among Staff
Coefficient:	-0.09					Coefficient:	-0.10
F Statistic:	4.3					F Statistic:	8.4
		Adjusted R^2 = 0.406				Regressor:	2.49 Employment Security
Adjusted R^2 = 0.322		n = No. of observations = 255				Coefficient:	0.09
n = No. of observations = 381		k = No. of parameters = 8				F Statistic:	8.3
k = No. of parameters = 9							

Table 5.6 (continued)

Income Maintenance Caseworkers	Social Service Workers/Caseworkers	"Other" Type Caseworkers	All Classes Caseworkers
			Regressor: 2.75 Need to Skip Channels Coefficient: 0.09 F Statistic: 6.7
			Regressor: 2.93 Concurrence State-Office Goals Coefficient: -0.07 F Statistic: 4.8
			Regressor: 2.53 Frequency of Policy Changes Coefficient: 0.07 F Statistic: 4.5
			Adjusted R^2 = 0.364
			n = No. of observations = 678
			k = No. of parameters = 13

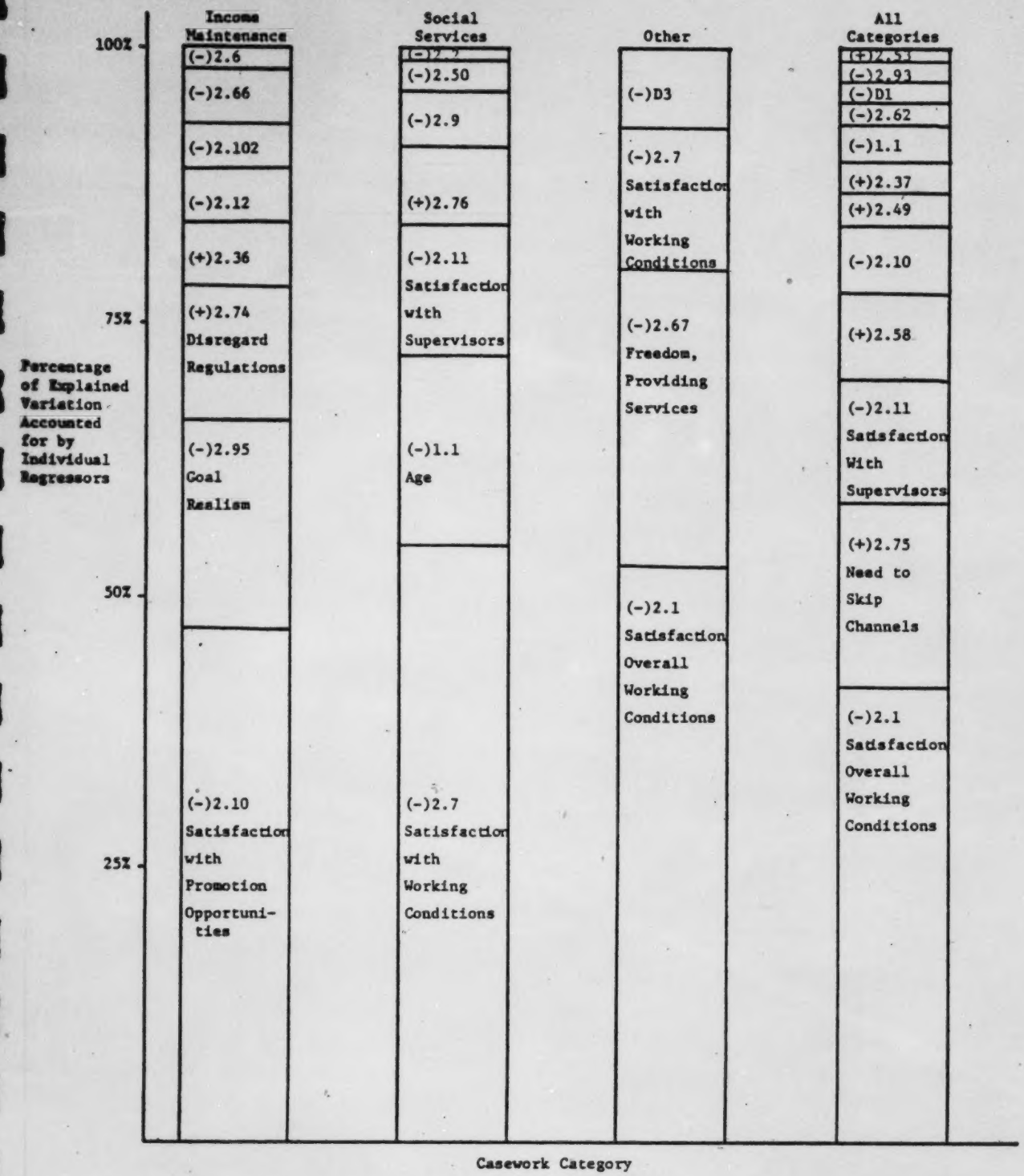


Fig. 5.6 - Relative Importance of Explanatory Variables for Selected Response Items From the Organizational Diagnostic Survey, Dependent Variable: Q # 2.60 (Likely to Leave Agency)

NOTE: Numbers appearing in bar charts denote questions in the Organizational Diagnostic Survey: Caseworkers; (-) denotes inverse relationships between variables (i.e., survey questions) and the indicated dependent variable; (+) denotes positive relationships between variables and indicated dependent variable.

The perceived need to disregard agency regulations in providing essential services, and the need to resort to emergency procedures, both have positive impacts on the likelihood of leaving the agency. If these factors are regarded as reflecting a caseworker's autonomy, their impacts should be negative. If, on the other hand, they are regarded as measures of the inadequacy of agency policy and procedures, their impacts would be positive as the empirical results suggest. On the basis of available evidence, one might reasonably conclude that the latter interpretation is more likely to be correct. Since each factor appears only once (need to disregard regulations occurs within the income maintenance category, need to use emergency procedures, within the social services category), any interpretation must be used with caution.

The factor of age appears in both the social services and aggregated caseworker categories; its impact is negative. As a person grows older, the range of employment opportunities often decreases. Under such circumstances, that person will become increasingly reluctant to leave his/her current job unless another one is waiting. This explanation probably accounts for the observed regression results.

Diminished job opportunities may also account for the negative impact that being a male has for "other" caseworkers. Social welfare work, in many states, is performed largely by women (an estimate of the percentage of women in the field is given in this study's review of the "HumRRO (1975) study of public financial assistance agencies). Since this field is predominantly female, males could well experience diminished employment opportunities, and may therefore be unwilling to leave their current jobs until they have firm offers of other employment. The regression's results provide credence for this explanation.

That being an income maintenance caseworker should be inversely related to the likelihood of leaving the agency might be accounted for by the nature of this type of work. Based on earlier examinations of the Organizational Diagnostic Survey's results, it was tentatively concluded that such personnel tend to have less favorable work-related perceptions than do other types of caseworkers. As work-related perceptions worsen, personnel are more likely to be receptive to the idea of alternate employment. The regression relationship for the aggregated caseworker category supports this conclusion.

Finally, the coefficient associated with employment security (aggregated caseworker category) is positive. Since increased employment security would, a priori, be expected to have a beneficial, or at the very least, zero effect, this finding is rather puzzling. It suggests that increasing levels of job security are accompanied by other developments that would make social welfare work increasingly unattractive.

Increased job security is often the result of a high degree of professional competence or, possibly, increasing levels of seniority. Since age and seniority are directly related, and increasing age decreases the likelihood of leaving the agency, seniority seems an inadequate explanation for employment security's negative coefficient.

If job security is a function of a person's professional qualifications, it may be that certain caseworkers are overqualified for their jobs or perceive themselves as being inadequately compensated. Under such circumstances, employment security is serving as a proxy for other factors. At the present time there is inadequate information to settle this question with any certainty.

One might question why variables that deal with pay satisfaction are not significantly related to the question of likelihood of leaving the agency. In part, this may be due specifically to the way in which the question is worded. The question as stated is, "If you received a firm offer at the same rate of pay from another agency engaged in the same type of service, to what extent would you be likely to leave your present position?" Obviously, it is presumed that comparable work and comparable pay are to be excluded from one's decision to select an appropriate response. Thus, if the question were interpreted properly, one would not expect significant variables to appear which are pay or task-oriented. In some instances this is not strictly the case and leaves open the possibility that the question itself was misinterpreted. This may be the case in the Social Services analysis where satisfaction with the type of work was associated with likelihood of leaving the agency.

Emotional Involvement

The regression results associated with caseworkers' attitudes towards emotional involvement are contained in Table 5.7 and Fig. 5.7; this material appears on the next two pages. All regressors are statistically significant at the 5% level, with the exception of survey question 2.46. Survey question 2.46 is significant only at levels in excess of 5% (e.g., it is significant at the 10% level).

Because social welfare work requires a certain amount of client involvement if it is to be done well, the issue of emotional involvement becomes relevant. As workloads increase, the degree of client involvement can become affected, and with it, caseworkers' perceptions of their jobs. The four regressions of Table 5.7 are intended to investigate these issues.

At the outset it should be noted that the explanatory power of each regression relationship is rather low. Since all survey questions which might conceivably relate to emotional involvement were made available as potential regressors, further data collection would be needed to adequately study this variable.

Given the low explanatory power of each regression, it seems most appropriate to concentrate attention on the two or three most strongly significant factors in each caseworker category; little useful information would seem lost by ignoring the rest. This conclusion is reinforced by an examination of Fig. 5.7, which relates to contributions made by each regressor toward total explained variation in the emotional involvement variable.

If one considers the two most significant factors in each caseworker category, one is immediately struck by lack of common factors between categories. Given the limited number of factors to be considered, it is simplest to discuss each category separately.

1. Income maintenance: As noted earlier, social welfare work requires a certain amount of client involvement. In this light, the direct impact that pressure for quality has on emotional involvement is to be expected

Table 5.7

REGRESSION RESULTS FOR REGRESSAND Q2.100: EMOTIONAL INVOLVEMENT BY, CASEWORKER TYPE

Income Maintenance Caseworkers	Social Service Workers/Caseworkers	"Other" Type Caseworkers	All Classes Caseworkers
Regressor: 2.28 Pressure for Quality	Regressor: 2.60 Likely to Leave Agency	Regressor: 1.1 Age	Regressor: D1 Income Maintenance Caseworker
Coefficient: 0.15	Coefficient: -0.13	Coefficient: 0.35	Coefficient: 0.31
F Statistic: 8.2	F Statistic: 4.2	F Statistic: 7.4	F Statistic: 67.7
Regressor: 2.74 Need to Disregard Regulations	Regressor: 2.30 Pressure from Clients	Regressor: 2.78 Info-Sharing Among Staff	Regressor: 2.92 Existence of Art. Goals
Coefficient: -0.14	Coefficient: -0.12	Coefficient: 0.26	Coefficient: 0.17
F Statistic: 7.3	F Statistic: 3.9	F Statistic: 4.1	F Statistic: 20.6
Regressor: 2.38 Stress			Regressor: D5 Being an "Other" Caseworker
Coefficient: -0.14			Coefficient: 0.15
F Statistic: 6.5			F Statistic: 14.8
Regressor: 2.30 Pressure from Clients	Adjusted R^2 = 0.026	Adjusted R^2 = 0.13	Regressor: 2.36 Perceived Role Conflict
Coefficient: 0.11	n = No. of observations = 255	n = No. of observations = 55	Coefficient: -0.13
F Statistic: 4.2	k = No. of parameters = 3	k = No. of parameters = 3	F Statistic: 11.9
Regressor: 2.46 Difficulty, Client Documentation			Regressor: 2.28 Pressure for Quality
Coefficient: 0.10			Coefficient: 0.09
F Statistic: 3.5			F Statistic: 6.7
			Regressor: 1.1 Age
			Coefficient: 0.10
			F Statistic: 6.2
Adjusted R^2 = 0.053			Regressor: 2.7 Satisfaction w/Working Conditions
n = No. of observations = 389			Coefficient: -0.1
k = No. of parameters = 6			F Statistic: 5.8
			Regressor: 2.26 Frequency, Interruption of Tasks
			Coefficient: -0.08
			F Statistic: 4.3
			Regressor: 2.3 Satisfaction With Job
			Coefficient: -0.08
			F Statistic: 4.3
			Adjusted R^2 = 0.160
			n = No. of observations = 678
			k = No. of parameters = 10

5.38

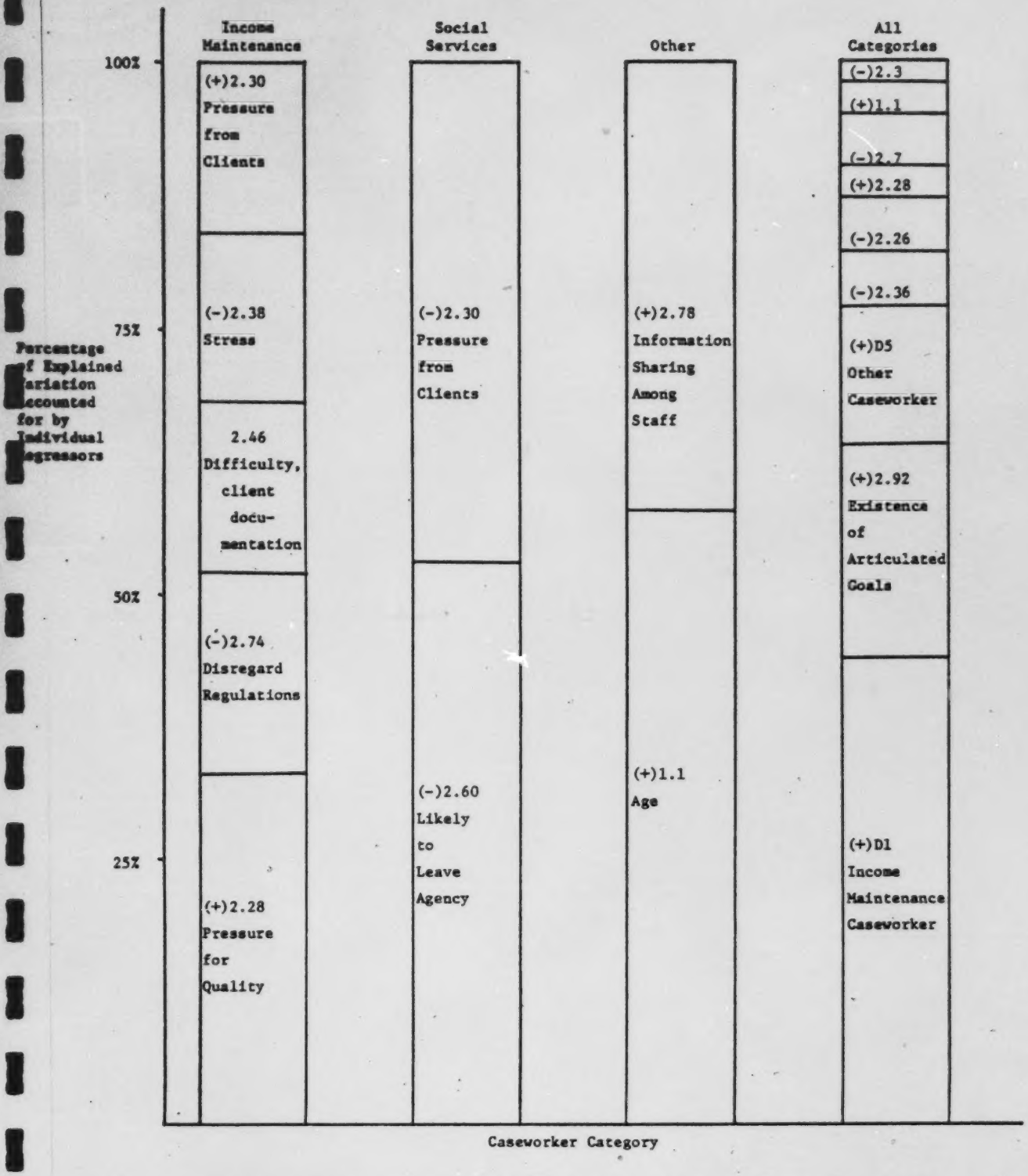


Fig. 5.7 - Relative Importance of Explanatory Variables for Selected Response Items From the Organizational Diagnostic Survey, Dependent Variable: Q # 2.100 (Emotional Involvement)

NOTE: Numbers appearing in bar charts denote questions in the Organizational Diagnostic Survey: Caseworkers; (-) denotes inverse relationships between variables (i.e. survey questions) and the indicated dependent variable; (+) denotes positive relationships between variables and indicated dependent variable.

(especially since income maintenance personnel are, relatively speaking, the least likely to become overinvolved).

The negative impact that the need to disregard regulations has on emotional involvement is similarly not surprising. Regulations are not likely to be ignored unless they are inadequate or workloads reach levels where their observance would be too time-consuming. Either possibility can result in increased pressure on the personnel involved, especially when caseloads become high. In an effort to reduce this pressure, affected personnel may reduce their involvement with individual clients.

2. Social services: Whenever social welfare personnel perceive that they are experiencing excessive stress, they may reduce their contacts with clients*; this phenomena was noted with regard to income maintenance personnel. Since pressure from clients is a source for such stress, its negative impact is not unexpected.

Whenever stress becomes acute and prolonged, the personnel involved may simply decide to find other types of work.** If this is the case with social services personnel, one might expect, as the regression results indicate, that the likelihood of leaving the agency is inversely related to emotional involvement.

3. "Other" caseworkers: It has been suggested*** that the ability of social welfare personnel to discuss their work among themselves is a potentially important means of reducing job-related stress. The positive impact noted for information-sharing among the staff tends to support this hypothesis.

Regression results suggest that age and emotional involvement are directly related; the reasons for this are not clear. It may be that older, more experienced caseworkers are more adept at dealing with clients and, therefore, more willing to become emotionally involved. It may also be that older workers perceive a greater need to do well in their jobs

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*Maslach, loc. cit.

**Ibid.

***Ibid.

(in order, among other reasons, to keep them). Since client involvement is involved, they may again be more willing to engage in it. A lack of information precludes definitive explanations, however.

4. Aggregated caseworker category: The existence of well articulated goals allows caseworkers to more clearly perceive the nature and contents of their jobs. Since such perceptions expedite and simplify their tasks, they (i.e., the perceptions) potentially reduce job pressure that can result from ambiguity. Under such circumstances, caseworkers may be more inclined to become involved with clients. The direct relationship that is indicated between emotional involvement and the existence of articulated goals can be explained in this way.

Regression results also indicate that being an income maintenance caseworker has a positive impact on emotional involvement. The administrative nature of income maintenance work probably precludes excessive emotional involvement; it may, in fact, tend to isolate such caseworkers from much emotional contact with their clients. Under such circumstances, income maintenance personnel may engage in such involvement, especially if they feel that this is necessary to improve the quality of their work (see preceding discussion of income maintenance caseworkers).

Finally, emotional involvement is apparently a function of the extent to which caseworkers must, by the nature of their work, become involved with their clients. Social services personnel who are most susceptible in this respect are the only group of caseworkers for whom both significant regressors have negative coefficients. In all other groups, one or both of these variables has a positive coefficient. Social service workers/caseworkers seem, therefore, to be more susceptible to negative factors governing emotional involvement than do other caseworker types.

Chapter 6

RESULTS OF A CONTENT ANALYSIS OF THE ORGANIZATIONAL DIAGNOSTIC SURVEY

BACKGROUND

The organizational survey administered to caseworkers, supervisors, and social service workers included a limited number of open ended questions. These questions were designed to solicit comments on areas that were perceived as in need of improvement. The first step was to select a random sample of questionnaires for coding of the written narratives of survey respondents. The purpose of this discussion is to present the areas that appeared most frequently in the 200 questionnaires of the random sample.

This analysis will be concerned with four questions:

- Suggestions to improve work situations and the quality of service offered to clients,
- How they would spend $1,000 to improve their effectiveness,
- How they would spend $10,000 to improve their effectiveness, and
- Describe a specific thing that they would change to make their job easier.

The number of possible response categories is such that the first step was to group all categories into 21 major groups. The results of this are presented in Table 6.1 for all four questions and 19 groups. The remaining two groups were omitted since they pertain to meaningless type responses, and did not include many responses.

The elimination of those categories that appear to be a minor concern allows for a more detailed analysis of the remaining categories. The second step of the analysis is represented by the results displayed in Table 6.2 through 6.5 for each of the four questions. Each question was considered in reference to the major response groups. Each group was analyzed at a lower level of aggregation to determine more specifically the areas of concern of the 200 survey participants sampled. Note: In the tables which follow, CW/SSW denote responses from all caseworkers (income maintenance, social services and "other") and social services workers.

Table 6.1

Major Response Categories for Organizational Survey Content Analysis

	Suggestion for Improvement			Do with $1,000			Do with $10,000			Specific Ideas		
	CW SSW	SUP I,II	OTHER SUP	CW SSW	SUP I,II	OTHER SUP	CW SSW	SUP I,II	OTHER SUP	CW SSW	SUP I,II	OTHER SUP
Staff Oriented	28	24	8	6	7	2	19	16	10	11	16	9
Worker Related	42	37	14	4	9	6	17	13	7	29	20	4
Agency Structure	37	21	8	0	0	0	1	0	0	6	6	9
Forms and Paperwork	43	28	13	0	0	0	0	0	0	15	5	0
Manual	0	3	3	1	0	0	0	0	0	2	2	1
Programs	5	3	0	0	0	0	1	0	1	4	1	0
Computerization	7	12	8	0	0	0	1	2	0	0	3	3
Policies and Procedures	12	13	1	6	3	1	4	5	0	13	8	2
Unusual Situations	1	0	0	0	0	0	0	0	0	0	2	0
Local Procedures	1	2	0	1	0	0	0	2	2	2	4	1
Office Facility & Accessories	3	1	0	28	13	2	29	14	4	4	2	0
Office Arrangement	2	3	0	10	5	1	12	14	2	2	2	0
Office Equipment	2	2	0	48	17	8	18	15	8	2	1	1
Office Supplies	0	0	0	3	3	0	0	0	0	0	0	0
Client Oriented	0	0	0	0	0	0	0	0	0	0	0	0
Community Resource Info. System	33	12	6	3	1	0	2	0	0	0	0	0
Additional Client Resources	2	0	0	14	5	7	11	7	1	2	1	0
Program	1	1	2	0	0	0	1	0	0	5	1	1
Special Equipment	0	0	0	1	0	0	2	0	0	0	0	0

Table 6.2

Suggestions to Improve Work Situation and Quality of Service

	Caseworker & SS Worker	Supervisors I & II	Other Supervisors
Staff Oriented	28	24	8
Local Allocations (increase)	18	14	6
Qualifications (change)	8	4	2
Worker Related	42	37	15
Incentives	23	21	7
Pay & Promotions	7	11	3
Decrease Workload	8	11	4
Change Worktime	3	5	2
Agency Structure	37	21	8
Change Structure/Organizations	17	7	2
Delegate Tasks to Clerical Staff	24	14	7
Forms & Paperwork	43	28	13
Decrease Volume	38	26	13
Forms Design	4	2	0
Computerization	7	12	8
Increase	6	11	7
Improve Existing	1	1	1
Policies & Procedures	11	13	2
Training on Programs	6	2	0
Change Department Procedures	7	8	0
Community Resource Information System	33	12	6
Information System	32	11	5
Resource Fiche	0	1	0
Client Information Pamphlets	1	0	1

Table 6.3

Do With $1,000 to Improve Effectiveness

	Caseworker & SS Worker	Supervisors I & II	Other Supervisors
Staff Oriented	6	7	2
Local Allocations	3	4	1
Other Local Resources	1	2	1
Worker Related	4	9	6
Incentives	2	6	4
Pay & Promotions	2	3	2
Office Facilities & Accessories	28	13	2
Facilities	17	7	1
Accessories	14	7	1
Office Arrangement	10	5	1
Office Equipment	48	17	8
Telephone	17	2	1
Data Processing	4	4	2
Word Processing	26	9	4
Information Equipment/Materials	4	5	4
Office Conveniences	6	2	0
Office Supplies	3	3	0
Client Oriented	14	5	7
Client Fund	12	4	6
Client Resources	0	1	1

Table 6.4

Do With $10,000 to Improve Effectiveness

	Caseworker & SS Worker	Supervisors 1 & II	Other Supervisors
Staff Oriented	19	16	10
Local Allocations	19	15	9
Other	0	1	1
Worker Related	17	13	7
Incentives	3	5	3
Pay & Promotions	13	7	4
Office Facilities & Accessories	29	14	4
Facilities	20	10	2
Accessories	14	9	2
Office Arrangement	12	14	2
Office Equipment	18	15	8
Telephone	8	5	2
Word Processing	10	5	6
Information Equipment/Materials	2	3	1
Client Oriented	11	7	1
Client Fund	9	6	1
Other Client Resource	2	1	1

Table 6.5

Specific Thing Change to Make Job Easier

	Caseworker & SS Worker	Supervisors I & II	Other Supervisors
Staff Oriented	11	16	9
Local Allocations	5	11	6
Change Qualifications	5	3	0
Worker Related	29	20	4
Incentives	1	0	0
Pay & Promotions	2	7	3
Decrease Workload	11	7	0
Flexible Worktime	4	4	0
Agency Structure	6	6	9
Change Structure	4	4	6
Delegate Tasks to Clerical Staff	0	2	0
Forms & Paperwork	15	5	0
Reduce Volume	13	4	0
Policies & Procedures	13	8	2
Training	2	1	0
Department Procedures	5	4	0

SUMMARY OF RESULTS

The most frequently made suggestions for improving working environments, and/or the quality of service to clients were:

- To decrease the volume of forms and paperwork. It was also suggested that more tasks be delegated to clerical staffs.
- Develop a community resource information system.

To a lesser extent, increases in local staff allocations and provision of incentives to workers were other frequently mentioned suggestions (see Table 6.2 for details). It should also be noted that the relative frequency with which various suggestions were made was largely unaffected by respondent type (i.e., supervisors at levels I and II, other supervisors, and caseworkers/workers).

Suggestions for making agency work easier were consistent with those for improving the working environment and/or quality of service to clients. Among caseworker/workers and I and II level supervisors, it was frequently suggested that workloads be decreased and more specifically that the volume of paperwork be reduced. Supervisors (all levels) recommend changes in local staff allocations, and in the handling of pay and promotions for their staffs (for further detail, see Table 6.5).

If an additional $1,000 were allocated to their offices, most respondents suggested additions to available office equipment and, to a lesser extent, additions to office facilities and accessories. In the former category, caseworkers/workers indicated a preference for more telephones and word processing equipment; among supervisors, the suggestions centered on word processing equipment and information equipment/materials (see Table 6.3 for details).

If $10,000 of additional funding was available to their offices, caseworkers would still emphasize the acquisition of office facilities and accessories. To a somewhat lesser extent, they would recommend expenditures on local staff allocations, office equipment, and in such worker-related areas as incentives and pay and promotions. Supervisors (all levels), on the other hand, most often suggested changes in local staff allocations and additions to office equipment. To a lesser extent they recommended expenditures for office facilities and accessories, changes in office arrangements, and incentives and pay and promotions for their staffs (see Table 6.4 for details).

Chapter 7

DEMONSTRATIONS FOR THE SECOND PHASE OF THE PROJECT

BACKGROUND

The purpose of this chapter is to propose several demonstration project ideas for possible implementation in the second year of the Manpower Planning Project. For the most part, these ideas were developed from an evaluation of the data gathered during the first year of the project. The project ideas are not necessarily program- or office-centered, but more appropriately "personnel-centered," which is in keeping with the overall project goal to improve worker productivity and effectiveness through manpower planning.

The demonstrations are intended to alter three facets of the organization:

- The tasks that workers perform, including both their number (workload allocation) and mix (job redesign).
- The organizational climate perceived by staff as it affects their attitudes (e.g., job satisfaction), behavior (e.g., turnover), and performance (e.g., case production, errors, etc.).
- The qualifications required by staff to perform functions that achieve the goals of the organization.

Demonstrations that can be characterized as personnel-centered and can produce changes in tasks, climate and/or qualifications should be the prime conceptual criteria for consideration. The following demonstrations are worthy of consideration because they focus on problems uncovered in the first year of the project and they satisfy the conceptual criteria previously noted:

- Job Redesign. There are two projects described in this chapter, principally those (Demonstrations #1 and #2) recommended by Dr. H. George Frederickson in his report in this chapter.

(1) The first project recommends that the job title distinction at the caseworker level be eliminated and that all caseworkers be permitted to perform tasks that fall under either Income Maintenance or Social Service. The FJA Task Bank would be used by caseworkers to select the tasks they feel most comfortable in performing and that represent a reasonable match between staff skills and task requirements. The main feature of this demonstration is that it implements the Missouri Task Bank into a "real-time" situation and examines the task preferences of office personnel. The relative importance, frequency and complexity of the tasks should be determined by the specific work objectives of the demonstration office. The Management By Objectives (MBO) plan of DFS should be used as a guide and translated to office-specific objectives.

(2) The second project is to alter the functional orientation of work in terms of the extent to which it deals with people, data or things. This second project recommends that specialization by functional orientation be attempted. Specifically, those mechanistic tasks whose functional orientation is more data- and things-oriented should be consolidated and distinctions between Social Service and Income Maintenance for these tasks be eliminated. This effort should be coupled with a plan to accomplish those tasks in a more capital-intensive mode, with the feasibility of remote site computer processing considered.

• Workload Allocation. This demonstration is an outgrowth of the material developed in Volume IV, "Development and Testing of Workload Analysis Methods in the Division of Family Services." The results of this workload study suggest that office specific variables are the most important determinants of equitable workload allocation. The variance in workload from one office to the next is not nearly as great as the variance that exists from one caseworker to the next within an office. The purpose of this demonstration is to explore the reasons for variance in caseload allocation within offices and develop a method at the office level for supervisors to allocate case work.

• Climate Modification. This demonstration is actually a series of actions that can be implemented in one or more small to medium size offices. It features organizational development, team building and client contracting, and is described in more detail in Dr. Frederickson's report (Demonstration #3) that follows immediately after this section. Training in interpersonal skills as they relate to clients is emphasized in this project. In certain respects this project can be considered the companion to the second job redesign demonstration described on the previous page, since specialization by functional orientation is emphasized. The emphasis, however, switches from data and things to people, with the express purpose of altering unfavorable conditions of organizational climate. This centers primarily around the lack of job challenge, personal power and autonomy experienced by caseworkers.

• Job Qualification and Career Development. This project is an outgrowth of results from the FJA and Organizational Surveys which indicate an inappropriate match between worker qualifications and tasks performed, as well as a serious lack of career progression opportunity. The FJA Task Bank can be used to compute "General Educational Development" ratings necessary to perform a specific mix of caseworker tasks and these ratings can be used to assist in developing revised job qualifications and a career ladder for casework. Lowering the qualification standards for entry level Income Maintenance casework is one aspect of this demonstration that needs careful attention. This should be coupled with simultaneous cohort tracking of climate scores, FJA tasks and performance indicators to evaluate the practicality of such adjustments in qualifications and career ladders.

The remaining sections of this chapter deal with more specific information on the nature of the demonstrations themselves, possible sites (where appropriate) for implementation of these demonstrations, methods for monitoring the variables affected by the demonstrations and evaluating the outcomes.

REPORT OF DR. H. GEORGE FREDERICKSON ON PROPOSED DEMONSTRATION PROJECTS*

*Dr. Frederickson is a consultant to General Research Corporation and was (until January 1977) the Dean of the College of Public and Community Services, University of Missouri. He is presently President of Eastern Washington State University, Cheney, Washington.

BACKGROUND

In July of 1975 a contract was effected between the Social and Rehabilitation Service of the U.S. Department of Health, Education and Welfare, and the Department of Social Services of the State of Missouri. This contract was for the purpose of conducting a "Research and Demonstration Project: For the Purpose of Improving the Effectiveness of the Missouri Department of Social Services through Manpower Planning."

The first stage of that project was to identify major manpower problems in the State of Missouri's Division of Family Services, and to suggest some potential solutions to those problems; to develop tests and implement a Manpower Planning Management Information System; develop requisite data-gathering analysis and feedback mechanisms; and to use demonstration projects for purposes of testing the Manpower Planning Management Information System and the effectiveness of implemented manpower policies.

Much of the work of the project is being carried out by a contract between the Missouri Department of Social Services and the General Research Corporation, McLean, Virginia. During the first year of the project, the General Research Corporation engaged in two extensive surveys; one an organizational diagnostic survey, the other a Functional Job Analysis (FJA) report. This is likely the largest data gathering effort ever undertaken in any state department of social service. The results of these surveys have been analyzed and constitute excellent data upon which to base concepts for the development of test sites and demonstration projects for those sites.

The specific task of this consultant is to recommend some approaches to the selection of test sites, and the development and implementation of feasible demonstration projects. In addition, the consultant is to advise as to feasible measures of manpower performance associated with demonstration projects. To do this, the consultant interviewed several employees of the State of Missouri, including Ewing Gourley, Dwain Hovis, Jack Pitzer, Thomas McLaughlin, John Pletz, Marie Williams, and sundry others. In addition, the consultant interviewed employees of and consultants to GRC, including Daniel Huck, David Grissmer, and Sidney Fine. Also, the consultant read an array of background materials, including memoranda, questionnaire findings, working papers, and materials associated with the continuation application to the Social and Rehabilitation Service of DHEW.

SOME EXPECTATIONS

Based on interviews with the principals involved, it would probably be useful to review some of their expectations of the Manpower Planning Project. This review will not involve attribution, but will attempt to summarize and synthesize expectations around which there seem to be at least some agreement.

First, there is an expectation that the project will come to grips with the question of workload. It is assumed, I believe, that this will be done by category of client, as well as category of staff member.

Second, it is expected that there will be developed a means by which staff members can more accurately describe their duties. It is assumed, I believe, that this description of duties will have a direct relationship to workload. It is by way of saying, "This is the nature of my work, and this is the ordinary, standard, or expected amount of it that I customarily do."

Third, there is an expectation that some consideration will be given to what constitutes effectiveness or quality in work. This is to say that while the first objective may be to measure the amount of work, that a closely associated objective is to measure the quality of that work.

Fourth, closely associated with the above three expectations is the assumption that the project will address the issue of what constitutes appropriate qualifications for worker by category of work; what ought to be the level and nature of their education, the kind of training they receive and the like.

Fifth, there is the expectation that there will emerge from this project a management information system developed from a manpower perspective. It is assumed, I believe, that this management information system would include detailed indices or measurements of the above four expectations.

Sixth, there is an expectation that the project would include an analysis of, or at least a review of the characteristics of the organization of the Division of Family Services. It is assumed, I believe, that there will be a look at the structure of the hierarchy, patterns of supervision, patterns of career development, the nature of work by category, the relationship between organizational design and work activities, and aspects of the

personnel system including formal job descriptions, rules and steps associated with career development, qualifications for work, and the like.

Seventh, there is an expectation that the project will assess how staff members feel about their work, to include what it is that they do, how they respond to it, what their preferences are, and what their expectations are with respect to their careers, their relationships with each other, and their relationships with clients and supervisors.

Eighth, there is an expectation that demonstration projects will be developed which will utilize all of the above for the purpose of developing improved manpower systems that can show evidence of improved productivity.

There is a somewhat separate set of expectations regarding the detail of demonstration projects, to include their selection, their purposes and their products. It is generally agreed that the demonstration projects should be able to measure, as precisely as possible, the results or effects of changes. In other words, demonstrations will need to have more than "narrative-descriptive" statements as to their consequences. It is further assumed that some already identified variables will be manipulated in the demonstration projects. The Continuation Application included the following statement: "The culmination of the first year effort will be a baseline of data on such 'causal' variables as structure, policies, and skills; such 'intervening' variables as supervision, attitudes, performance goals, communication, job satisfaction and group cohesiveness; and such 'dependent' variables as turnover, absenteeism, performance, cost and client satisfaction. The experimental design will identify organizational units for either Solomon four-group, or the pretest/post-test/control group methods, although the project staff is aware that it will be nearly impossible to locate or maintain over time the perfectly matched units called for in theory."

This sketchy summary of expectations of the manpower project provides a convenient backdrop for a summary review of the findings of the project during its first year functioning.

A SUMMARY OF FINDINGS

The findings to date in the manpower project range all the way from informed observations by experienced staff members to the analysis of questionnaire data. In this brief summary there will <u>not</u> be an attempt to

sharply differentiate between findings on the basis of methodology by which the findings were reached, nor even to assess the veracity of the findings. It is important, however, to review these findings because they provide the substance necessary to guide the selection of demonstration projects that will get at some of the problems of the Division of Family Services.

1. The nature of much of the work of the Income Maintenance caseworker, as well as the Social Service caseworker, is highly mechanistic.
2. The Income Maintenance caseworker staff is probably over-qualified, and that may also be true of the Social Service caseworker staff.
3. The Income Maintenance career ladder narrows too sharply and does not provide for sufficient career mobility, and consequently many Income Maintenance workers seeking expansion of responsibilities "cross over to the Social Service career ladder" where the hierarchy does not narrow so sharply.
4. In very general and broad terms, the staff is far more effective at handling routine requests for services, such as food stamps, or ADC; the staff is less adept at handling "variants" or those clients needing multiple services or special references. The estimates are that less than 15% of food stamp clients require anything other than routine services, and less than 25% of Social Service and Income Maintenance clients require anything other than routine services.
5. The maintenance of different eligibility checking systems based on the nature of services desired is not cost-effective. There is considerable criticism of the eligibility checking system, primarily because it can significantly delay the delivery of services. It could be fairly easily mechanized, particularly if one standard of eligibility served all clients in different categories. But most important of all, the level of ineligible applicants is so low (and the ineligible applicant is usually easy to spot) that the maintenance of a large and costly eligibility checking staff and procedure is simply not cost-effective.

6. The adoption of "consolidated standards" has to some extent routinized the processing of clients in terms of eligibility, but that appears to break down when it comes to the processes of checking on eligibility. It appears that this finding is simply picking up the difference in perspective between the Social Service worker seeking to provide services in an effective and timely way, and the eligibility functionary taking the time to check every detail of eligibility, thereby slowing down the process of delivering services.
7. In certain offices of the Division of Family Services there is some feeling, particularly on the part of Income Maintenance caseworkers, that they are unfairly treated as compared to the Social Service staff in terms of career ladder possibilities, the routine of their work, the level of the caseload, and the question of pay. Indeed, the data gathered by the questionnaire indicates that Income Maintenance caseworkers show lower job satisfaction, lower job motivation, lower stability of work environment, and lower personal power and autonomy than do the Social Service caseworkers. The data further show negative responses to both pay and promotion opportunities to be greater among Income Maintenance caseworkers as against Social Service caseworkers.

DEMONSTRATION PROJECTS

Several criteria need to be employed in the selection of sites for demonstration projects and in the formulation of those projects. First, it should probably be assumed that there be three and certainly no more than four good projects rather than a larger number of projects done less well. Second, a project needs to be able to manipulate variables of the sort described above so as to test the effect of that manipulation on productivity. Third, changes in the organization of work need to be fundamental enough so that one can see real movement in productivity indicators. Fourth, the demonstration projects need to be contextual; that is, recognizing the special needs and unique characteristics of each Social Service office. This suggests the necessity of negotiating

with the staff in that office so as to enlist their cooperation. Fifth, an attempt should be made to have "successful demonstrations." This is to say that the variables should be pushed and pulled in an effort to find that mix of arrangements that produces the best possible results. Finally, the demonstration projects should be as open and daring as possible, given the constraints of context. It is assumed, of course, for every demonstration project there will need to be at least one control group, or one other similar Social Service office that will be used for purposes of comparison so as to measure difference between productivity in the demonstration project and in a site not being used for demonstration purposes.

INDICES OF PRODUCTIVITY

For each of the demonstration projects and for their control groups there will need to be indices of productivity that enable managers to evaluate the effectiveness of the demonstration. It is recommended that primarily data routinely or ordinarily collected be used for this purpose. If additional data are needed, it should be simple or easy to collect and not costly to process. The most obvious indices are: (a) error rates, (b) staff turnover, (c) staff tardiness/absenteeism, (d) volume of work (caseload), (e) time from first visit to first receipt of benefits, (f) ratio of all service costs to benefits provided by office, and (g) costs per eligibility check as a function of those found ineligible.

There should be developed some measure of responsiveness. This may require the client to fill out a brief form upon leaving the office after each visit. This should indicate whether the client had routine needs, such as food stamps and only food stamps, or whether the client was a "variant" needing multiple services. Such a form should also assess the client's attitude toward the responsiveness and demeanor of those providing service. There should also be a measure of time required for and the costs associated with the eligibility check. This measure should include the percent or number of applicants who are spun out of the system because of eligibility problems.

DEMONSTRATION PROJECTS

It is important to repeat again that each demonstration project should be the result of extensive negotiation between and among the parties involved. It is further important to indicate that the design of these proposed demonstration projects is to comprehend as much as is usable from the demonstration project suggestions contained in the Continuation Application as well as to synthesize subsequent suggestions from both the Missouri Division of Family Services and the General Research Corporation.

Demonstration Project #1

I would recommend a demonstration project that has to do primarily with restructuring the nature and processes of work, particularly having to do with the differences between the Income Maintenance and the Social Service caseworkers. This project would be designed primarily to blur the distinctions between these two categories of workers. If it were possible through negotiations with the State personnel people to have an office set up in such a way that there are no distinctions between caseworkers, then through functional job analysis it would be possible to get at a relatively good match between skills and jobs. Those workers who are relatively comfortable with handling routine, but have an interest in career opportunities, could be assigned to routine work and not be penalized in career terms. Those workers who have an interest in handling the variant cases and are bothered by large amounts of paperwork should be allowed to do that, but not necessarily be given special rewards such as nicer offices, more time away from the office, a better career potential and the like. Even that would not be particularly bad so long as these persons were not singled out as of a higher "caste" more easily eligible for promotion and for improved pay. Such a demonstration project will require rather heavy "front-end investment." Two or three people will need to go into a county office and engage in setting up these arrangements. This will require some fine tuning through time because mistakes will be made initially which will need to be corrected. This demonstration project will be primarily for the purpose of letting caseworkers do that kind of work which they most particularly want to do without forcing them to do the kinds of work they see necessary to do so as to get desired promotions or improved pay. It should not be assumed that such a demonstration project would show many results

in terms of increased productivity. Rather, this project should be able to show significant impact in terms of the quality of work. Clients should see such an office as responsive, as made up of workers who are relatively happy in their work and interested in the clients' problems and concerns. This demonstration project should also be relatively effective in terms of controls over absenteeism, tardiness, turnover, worker satisfaction, error rate, and the like.

Demonstration Project #2

A second demonstration project might wish to focus on a far more technical and mechanistic approach to clients. In this approach it should be assumed that only a small percentage of applicants need anything other than a single relatively well-defined service. In such a project workers without much of a background or set of skills in Social Services or social work can be trained to assist in the preparation of forms, process the requests for aid, and process the checking of eligibility in extremely efficient ways. Such a Social Service office would do hardly any "hands-on" social work. This office would be set up as the most efficient machine for delivering food stamps, Income Maintenance, and Social Services. One possible set-up for an office such as this would be an intake point staffed by a highly experienced Social Service employee who could then "direct traffic" to banks of functionaries who use a mostly mechanistic approach to the provision of services. This suggests the possibility of consolidating the eligibility functions now done separately by Income Maintenance and Social Service workers. It should be assumed in this demonstration project that a high volume of caseload is possible, that error rates can be sharply reduced, that the number of clients served per caseworker can be very high. The thing to be watched carefully would be the extent to which worker satisfaction does or does not drop; the extent to which tardiness or absenteeism does or does not drop; what effect this has on turnover; and its effect on the morale of the staff. In addition, it will be important to carefully watch rates of eligibility.

In doing this demonstration project, it might be useful to put in another nearby building, or in another office, those caseworkers who handle the "variants." In this way there should not be a direct interaction between those handling this far more mechanistic approach and those who are

doing "hands-on" social work. It might also be possible, although this could be difficult, to winnow out through time the "over-qualified," and to staff an office with a more clerical type, and to move to other locations, at least temporarily, those inclined either by education or personality to want to do social work. It might also be useful to build in some pay or promotion or other career incentives to those doing routine work.

It is recommended that this be done in an urban area where there is enough volume of business to carry it out, and where there can be some mobility between offices so that workers not wishing to be involved in this experiment can be temporarily relocated.

On this demonstration project it would probably be useful to check with the folks in Greene and Buchanan counties where there evidently is a full caseworker at the intake point who directs traffic. They may have some good ideas how best to do this.

If such a demonstration project were successful, it might show a far more efficient system that doesn't necessarily result in lower worker morale, absenteeism, tardiness, turnover, and the like, as was the case in Demonstration Project #1. This will require some extensive front-end investment of the type described above.

Demonstration Project #3

An attempt might be made to do a combination of organization development, team building, and client contracting. This might be most effective in offices where the staffs are relatively small, where there is already some level of cohesion among employees, and where the volume of clients is not so overwhelming as to preclude finding the necessary time to do team building, and to develop some concept of client contracting. This would likely require the use of Functional Job Analysis, some time spent on OD training or other techniques of humanizing the staff and sensitizing it to the background needs and characteristics of clients. Then it will be necessary to do some extensive training before setting up a contractual relationship between the office Social Service team and the client. This would be designed primarily to treat every client as if he or she were at least a "partial variant." The client may be seeking just one service, such as food stamps, but the office would take a more direct interest in

other aspects of the client's situation, to include housing, health care, nutrition, a possible need for day care for children, etc. The purpose would be to cause the staff to feel as if they had more control over the work environment and their purposes, to improve the quality of services, to improve morale, and general worker satisfaction. But above all, to provide a very high quality of social services. The indices of effectiveness should be able to tell if this effect occurs. This project will also require a strong front-end investment and will probably also require some "hands-on" help from the Division and from the General Research Corporation.

It may well be that developing an office in this way has no perceptible effect on the ultimate quality of services, and that the results are not especially different from Demonstration Project #2, the mechanistic model. If that is the case, then those states interested in efficiency and cost-effectiveness would probably want to opt for the more mechanistic model.

In all three of these demonstration projects it will be important to get the nearest possible analogue as a control group and to at least keep a steady monitoring of their error rates and other measures of productivity that are already gathered on a routine basis. It might also be possible to administer certain of the special instruments developed to measure worker satisfaction and the like at the demonstration sites.

ADDITIONAL DEMONSTRATION PROJECT IDEAS

Background

The previous section contains a consulting report that suggests three demonstration ideas for possible implementation during the second year of the project. The purpose of this section is to enlarge on one of the three demonstrations proposed by Dr. Frederickson and suggest two others that represent an outgrowth of the job and workload analysis efforts.

Computer Supported Casework

It has been noted in a number of instances throughout these reports that data-oriented tasks permeate the entire organization and that significant opportunity exists to transfer these tasks into a computer-supported work environment. In considering such a movement to that environment, the following factors should be kept in mind:

- The results of the FJA and Workload Analysis effort clearly show that the prime functional orientation of casework is "data," as opposed to "people" and/or "things." Further, the bulk of caseworker time is expended on data-oriented tasks and the process of communication revolves primarily around the need to exchange data-oriented information.

- The results of the Organizational Survey reveal that Income Maintenance casework, which is heavily data-oriented, ranks lowest on most climate dimension scores and is also subject to the highest degree of personnel turbulence (absenteeism, attrition, job change, etc.). This observation appears to be due to the mismatch between personnel employed (psychographically defined) and work actually done (FJA defined).

- Routine, mechanistic tasks are not really "human" work, no matter how necessary they are to the survival of an organization.

The less that is required in terms of human discretion to perform a task, the more adaptable the work is to a computer environment. Ironically, the desire to seek organizational perfection in the delivery of benefits has created too much "inhuman" work for case-work personnel and should be relegated to a computer.

What should be created in a demonstration is a computer-supported work environment which integrates computer functions with people functions to more effectively accomplish organizational objectives. We suggest such a demonstration would require:

- Identification of tasks suitable for conversion;
- Preparation of a system design of a computer-supported office;
- Development of software and installation of hardware to handle the data functions;
- Training of office personnel in equipment utilization and system potential;
- Implementation of the system for real-time tests; and
- Evaluation of demonstration on cost-effectiveness criteria.

This demonstration is essentially an expansion of one proposed (Demonstration #2) by Dr. Frederickson in the previous section of this chapter. A remote-site teleprocessing system installed in an office can provide the following essential data-oriented functions:

- Case record information storage and retrieval. Development of the client data base by the management information task force can make this function a reality during the demonstration phase of the project. What is suggested here is that a further step be taken to provide mass storage space for a particular office and permit them to access and retrieve case data via remote-site terminal.

- Data manipulation. One of the major work processes for both Income Maintenance and Social Services is eligibility determination. To the extent that the data recorded as well as the rules for calculating the degree of benefit eligibility are standardized, such work can best be performed by a computer.

- Performance monitoring. A computer-supported office would have the capability of producing a wide variety of performance in case action reports;

for example, caseworker production by mix and volume of cases could be tracked over time. Daily case transaction reports could be produced; a combined client benefit/service history report could be produced, which would provide by client name (SSN) an entire history of payments and services received since the inception of the case.

Long term, it is possible to develop an extremely sophisticated computerized system which could be used to construct an eligibility priority system, which would, in effect, generate the probability of producing an error (either client- or system-generated) based on the number and type of eligibility checks made. This could be done by careful tracking of eligibility errors over time and assigning probabilities along with dollar values to the errors that would arise from the omission of such an eligibility check. This would provide a systematic means for eliminating unnecessary or low-risk eligibility checks, as well as creating for the office a priority system to reduce eligibility checks whenever a surge in workload occurs due to increased cases or inadequate staffing. If the cost of benefits and services is known, the dollar value of misapplied welfare resources can be estimated as a consequence of meeting fixed benefits/service turnaround times when a sudden surge in work occurs.

Another feature of the system is that it would be capable of producing client correspondence generated from the printer attached to the terminal. Printing of these letters could be triggered by the input of eligibility data by casework personnel. Also, the production of letters and correspondence would become part of a client transaction history file should a case investigation or review be required.

One of the primary objectives of DFS has been to reduce the mean number of days between initial application for a benefit and actual receipt of that benefit by the client. The installation of a teleprocessing system that would instantaneously provide the data computation and checking functions necessary in the determination of eligibility could significantly reduce this application decision time. Theoretically, it would even be possible to produce checks directly off the terminal should an initial eligibility screening by the computer determine that an acceptably low probability of erroneous payment would occur based on an analysis of the data submitted.

Another possibility of such a system is that it would provide supervisors with a superior method of allocating new cases to caseworkers if it were possible to numerically compute in any given time total workload of a caseworker in an office. The workload standards data being produced as part of this project effort would be an essential feature of this system.

Finally, the system itself has tremendous research potential which has equivalent value to both Income Maintenance and Social Service functions. With the upsurge in child abuse cases, the computer can provide necessary analytical power to isolate household characteristics that may contribute to the initial incidence and repetition of child abuse and neglect.

Workload Allocation

One of the most significant findings of the first year's research effort is that the primary concern of Division personnel is "system equity." The concern over system equity can be further divided into those issues which focus on the compensation system and those which focus on the work and resource allocation mechanisms. The purpose of this demonstration is to focus on the latter issues of work and resource allocation. More specifically, what is suggested here is to devise a caseload allocation scheme for supervisors to implement within an office.

Using the workload standards already developed, an office (S) should be selected in which caseloads would be computed using these standards and an investigation be conducted to determine why such a distribution of caseloads exists among the personnel within the office. Certainly this could be due to a combination of factors, not the least of which may be poor management skills on the part of supervisory personnel and a lack of information on the true caseload of each worker.

The objective of such an investigation would not necessarily result in an evening-out of the workload among all office personnel, for other factors such as motivation and job experience may be key determinants in the way in which casework is allocated.

Once such an investigation is completed, a supervisors' seminar should be conducted with the objective of developing better management skills in allocating casework among personnel within their respective offices.

One of the fundamental findings of the Functional Job Analysis conducted during the first phase of the project was that supervisors were not performing entirely appropriate supervisory tasks and that considerable training and development work is necessary at the supervisory level to improve their management skills. One way of doing that certainly is to provide them with the methods and tools to better analyze their current personnel caseloads.

Another feature of this demonstration is to provide supervisors with an arsenal of sanctions and incentives to encourage performance among their caseworkers. More specifically, it may be possible to develop a performance scoring system that would assign points (or deduct them) to a caseworker, depending upon the workload he maintains and the level of performance he achieves with that given workload. The rewards of such a point system might be a state-supervised promotion or bonus award system. The sanctions imposed, in addition to the obvious non-receipt of promotions or bonuses, might include the possibility of an actual demotion or dismissal in some rare instances, and/or a temporary freeze in future wage increases until standards of performance are met.

Job Qualification and Career Development

This volume has pointed out the need for serious reevaluation of job qualifications for entry level caseworkers. The purpose of this demonstration is to conduct a more careful examination of this problem, as well as develop a career ladder for casework personnel.

It is vital that progression on a career ladder be linked to improved performance and productivity of casework personnel. Without this link, upward movement on a career ladder could become an expensive travesty. Further, promotion opportunities must be realizable, that is, if the end strength of a work force is constant, there must be sufficient turnover at all levels to create vacancies that will permit the planned career progression. To build a meaningful career ladder will require additional work in job design, skill training, and the development of performance standards for casework.

It may be possible to build a career program that includes three levels:

- Basic entry level
- Journeyman level
- Expert level

Extensive use of the Missouri FJA Task Bank should be employed in the development of these three career levels. Each level should consist of a cluster of tasks identified by functional orientation and complexity, along with estimates of the aptitude requirements to meet performance standards at each of those career levels.

Probably the best approach is to develop on paper the entire career progression plan and then begin the demonstration by altering entry level job qualifications and track the attitudes, behavior and performance of test and control cohorts of new employees. This type of demonstration should be a longitudinal study that would track changes within a cohort over time as well as make comparisons among cohorts (both test and control) through the same time period.

It is recommended that both the FJA Self-Report and Organizational Diagnostic Survey be continued as part of the data collection effort required under this demonstration. However, both surveys should be combined into one and the volume of data collected reduced substantially. This condensed and abbreviated version could then be used to examine the interactions between tasks performed and attitudes exhibited by those monitored. Performance data must also be collected to include supervisor evaluation reports, casework production data (to include the mix and number of cases), and frequency and nature of errors associated with the work performed. Other behavioral variants, such as absenteeism and attrition, should also be tracked over time.

It has been suggested elsewhere in this volume that lowering the educational requirements for entry level casework should be considered. This action could be incorporated in the demonstration. However, careful attention should be given to developing an entire career ladder. With this fact in mind, it may turn out that the lower educational standards for entry level workers may prohibit them from progressing to higher career levels and create even more dissatisfaction than presently exists.

THE SELECTION OF POTENTIAL SITES FOR IMPLEMENTATION

One of the objectives of the first year's research effort was to identify potential office sites for implementation of demonstrations. One approach that was considered was to select offices on the basis of climate dimension scores resulting from the organizational survey conducted in July of 1976. Tables 7.1 and 7.2 display the survey results for one dimension and four question items for three counties displaying the least favorable results within each of the six geographic groupings used in this volume.

The data provide some initial indication of what offices might be possible candidates for demonstration projects; however, additional work is required before a final selection can be made.

Suggested demonstrations deal with four aspects of the organization:

- Job redesign
- Workload allocation
- Climate modification
- Job qualification and career development

Regarding job redesign, it is suggested that the first demonstration project intended to eliminate job title distinctions might best be accomplished in a small office in one of the rural county areas. To conduct a successful demonstration of this nature requires close cooperation and coordination between all staff members in an office; thus the smaller the office, the more likely such an initial demonstration will succeed. The second job redesign demonstration is intended to increase specialization by functional orientation. Such specialization is more amenable to a large office such as those located in the small or large urban areas.

The workload allocation demonstration can conceivably be introduced into any size office but it is suggested that possibly a suburban area of intermediate size be selected. The demonstration dealing with climate modification should be conducted in a small or medium size office since the nature of the proposed demonstration requires close cooperation between project staff and office personnel.

Table 7.1

THE THREE LEAST FAVORABLE COUNTY RESPONSES FOR SELECTED CRITERIA VARIABLES BY COUNTY TYPE: INCOME MAINTENANCE CASEWORKERS*

County Type	Job Satisfaction (DIM01)	Job Challenge (2.19)	Personnel Change (2.52)	Likely to Leave Agency (2.60)	Burden of Workload (2.102)
SMALL, LESS AFFLUENT, RURAL(48)**					
Av Response, Cty Type	3.30(127)	3.61(127)	1.98(127)	2.14(127)	2.29(96)
Least favorable	Camden:2.23(2)	Ozark:2.00(1)	Camden:4.00(2)	Laclede:5.00(1)	Benton:1.50(2)
2nd least favorable	St.Clair:2.55(1)	Camden:2.50(2)	Perry:4.00(1)	Ozard:5.00(1)	Camden:1.50(2)
3rd least favorable	Henry:2.73(2)	Henry:2.50(2)	McDonald:3.25(4)	Perry:4.00(1)	Mississippi:1.63(11)
SMALL, MORE AFFLUENT, RURAL(13)					
Av Response, Cty Type	3.19(18)	3.35(17)	1.22(18)	2.11(18)	1.80(15)
	Linn:1.82(1)	Linn:2.00(1)	Andrew:3.00(1)	Gasconade:4.00(2)	Andrew:1.00(1)
	Cooper:2.82(2)	Bates:2.50(2)	Macon:3.00(1)	Warren:4.00(2)	Linn:1.00(1)
	Andrew:2.91(1)	Grundy:2.50(2)	Bates:1.00(2)	Grundy:3.50(2)	Pike:1.00(2)
LARGE RURAL(17)					
Av Response, Cty Type	3.26(83)	3.47(83)	2.66(83)	2.33(82)	2.32(73)
	Randolph:2.85(3)	Stoddard:2.29(7)	Johnson:3.75(4)	St.Francois:3.50(6)	Marion:1.00(1)
	Stoddard:2.95(7)	Callaway:2.67(3)	Butler:3.73(11)	Callaway:3.33(3)	Randolph:1.50(3)
	St.Francois:3.03(6)	Audrain:3.00(2)	Saline:3.50(2)	Stoddard:3.29(7)	St.Francois:1.50(6)
SMALL URBAN(6)					
Av Response, Cty Type	2.93(57)	2.74(57)	3.60(57)	2.68(57)	2.08(51)
	Cole:2.73(4)	Boone:1.50(6)	Boone:4.17(6)	Greene:3.04(25)	Cape Girardeau:1.00(5)
	Greene:2.79(25)	Cole:2.75(4)	Cape Girardeau:4.00(5)	Pulaski:2.75(4)	Cole:1.50(4)
	Pulaski:2.89(4)	Green:2.80(25)	Cole:3.75(4)	Cole:2.50(4)	Pulaski:1.67(4)
SUBURBAN(7)					
Av Response, Cty Type	2.93(57)	2.82(57)	2.93(57)	2.74(57)	2.36(53)
	Buchanan:2.63(18)	Franklin:2.13(8)	Clay:3.67(6)	Buchanan:3.50(18)	Cass:2.00(3)
	Clay:2.82(6)	Clay:2.33(6)	Jefferson:3.58(12)	St.Charles:3.13(8)	Jefferson:2.25(12)
	St.Charles:2.94(8)	Platte:2.50(2)	Buchanan:3.00(18)	Clay:2.50(6)	Buchanan:2.47(18)
LARGE URBAN(3)					
Av Response, Cty Type	2.56(2.59)	2.18(256)	3.95(258)	3.13(256)	2.45(233)
	St.Louis:2.45(16)	St.Louis City:	St.Louis:4.75(16)	St.Louis:3.63(16)	St.Louis:1.94(15)
	St.Louis City:	2.10(159)	Jackson:4.06(84)	Jackson:3.15(84)	Jackson:2.37(84)
	2.46(159)	St.Louis:2.19(16)	St.Louis City:3.81(159	St. Louis City:3.06(159)	St. Louis City:2.55(159)
	Jackson:2.77(84)	Jackson:2.34(84)			

*The numbers in ( ) are the number of responses that are associated with each average response. The numbers used for the individual county responses are those associated with DIM01, regardless of variable under consideration.

**The numbers in ( ) next to the county type titles are the number of counties of each county type that were sampled.

Table 7.2

THE THREE LEAST FAVORABLE COUNTY RESPONSES FOR SELECTED CRITERIA VARIABLES BY COUNTY TYPE: SOCIAL SERVICE WORKERS/CASEWORKERS*

County Type	Job Satisfaction (DIM01)	Job Challenge (2.19)	Personnel Change (2.52)	Likely to Leave Agency (2.60)	Burden of Workload (2.102)
SMALL, LESS AFFLUENT, RURAL(41)**					
Av Response, Cty Type	3.28(65)	3.74(65)	1.91(65)	2.43(65)	2.10(60)
Least favorable	Dent:1.91(1)	Daviess:1.00(1)	Howell:5.00(1)	Dent:5.00(1)	Carter:1.00(1)
2nd least favorable	Howell:2.09(1)	Howell:1.00(1)	Iron:4.00(1)	Howard:5.00(1)	Gentry:1.00(1)
3rd least favorable	Miller:2.18(1)	Miller:2.00(1)	Miller:4.00(1)	Howell:5.00(1)	Howell:1.00(1)
SMALL, MORE AFFLUENT, RURAL(13)					
Av Response, Cty Type	3.07(16)	3.81(16)	1.50(16)	2.63(16)	1.71(14)
	Holt:1.91(1)	Bates:3.00(1)	Macon:3.00(1)	Holt:5.00(1)	Clinton:1.00(1)
	Bates:2.55(1)	Macon:3.00(1)	Sullivan:3.00(1)	Lewis:5.00(1)	Holt:1.00(1)
	Grundy:2.55(1)	Warren:3.00(1)	Bates:2.00(1)	Grundy:4.00(1)	Pike:1.00(2)
LARGE RURAL(17)					
Av Response, Cty Type	3.21(46)	3.76(46)	2.78(46)	2.74(46)	2.14(44)
	Callaway:2.61(3)	Callaway:2.33(3)	Butler:4.33(3)	Lafayette:4.50(2)	Johnson:1.50(2)
	Lafayette:2.77(2)	Newton:3.00(1)	Marion:4.00(4)	Saline:4.50(2)	Pettis:1.50(2)
	Phelps:2.86(2)	Audrain:3.00(3)	Saline:4.00(2)	Marion:4.25(4)	Saline:1.50(2)
SMALL URBAN(6)					
Av Response, Cty Type	3.05(28)	3.48(27)	3.71(28)	3.04(28)	2.27(26)
	Pulaski:2.64(2)	Pulaski:3.00(2)	Boone:4.60(5)	Pulaski:4.50(2)	Pulaski:1.50(2)
	Boone:2.87(5)	Greene:3.25(8)	Greene:4.13(8)	Boone:4.40(5)	Jasper:1.86(8)
	Greene:2.94(8)	Cape Girardeau:3.50(2)	Pulaski:4.00(2)	Greene:3.75(8)	Boone:2.00(5)
SUBURBAN(7)					
Av Response, Cty Type	2.95(30)	3.30(30)	3.03(30)	2.90(30)	1.86(28)
	St.Charles:2.80(4)	Cass:2.00(1)	Clay:4.00(4)	Cass:5.00(1)	St.Charles:1.50(4)
	Clay:2.82(4)	Franklin:3.00(3)	Jefferson:3.50(4)	St.Charles:4.25(4)	Buchanan:1.60(12)
	Franklin:2.88(3)	St.Charles:3.00(4)	St.Charles:3.50(4)	Jefferson:3.25(4)	Jefferson:1.75(4)
LARGE URBAN(3)					
Av Response, Cty Type	2.77(146)	3.09(144)	3.84(142)	3.24(144)	2.23(126)
	St.Louis:2.70(24)	Jackson:3.06(36)	St. Louis:4.08(24)	St.Louis:3.42(24)	Jackson:2.07(36)
	St.Louis City:2.71(86)	St.Louis City:3.08(86)	Jackson:3.91(36)	St.Louis City:3.23(86)	St.Louis City:2.24(86)
	Jackson:2.97(36)	St.Louis:3.17(24)	St.Louis City:3.73(86)	Jackson:3.14(36)	St.Louis:2.44(24)

*The numbers in ( ) are the number of resp-nses that are associated with each average response. The numbers used for the individual county responses are those associated with DIM01, regardless of variable under consideration.

**The numbers in ( ) next to the county type titles are the number of counties of each county type that were sampled.

The remaining demonstration on job qualification and career development is not necessarily office-centered, yet some mechanism must be developed to track cohorts of individuals over time who reside in various offices. The criteria for selection of the participants in this demonstration should be based more on the demographic characteristics of the individual rather than what particular office he resides in. The computerized manpower planning system developed in the first year's effort should be used to support the tracking and analysis of data related to these cohorts over time.